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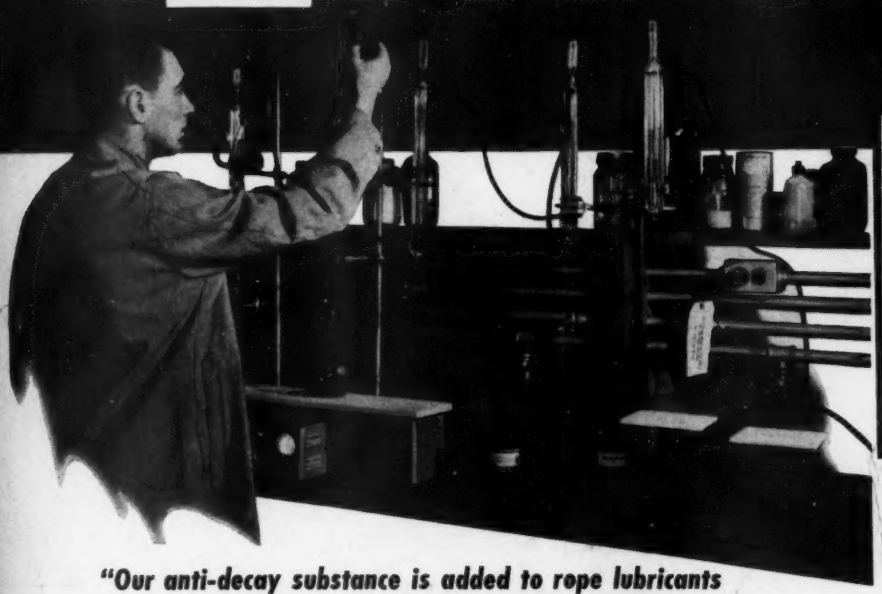
NATIONAL FISHERMAN

MARCH
1956

We Stop Rope-Rot Right Here!



Columbian Anti-Rot Treatment Begins Before Our Manila Fibres Even Enter the Production Lines.

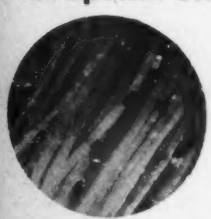
"Our anti-decay substance is added to rope lubricants in our laboratories, and applied to fibres before spinning . . . while it's still easy to reach every inch of every fibre."

From this point on, your Manila rope is protected at all times against mildew, mold and decay bacteria — even when you give it continuous usage, with no chance for thorough drying.

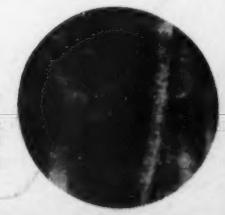
These are the very best of all Manila fibres. And they live out their full, stout, useful life *because rope-rot cannot harm them!*

Every foot of Columbian Manila Rope is adequately protected against decay for YOUR climate, YOUR uses, YOUR methods of handling!

Laboratory Tests Prove Power Of Special Columbian Treatment



Microphoto of *treated* Manila fibre after 2-week incubation with green mold spores. *Only original spores applied for test are present.*



Microphoto of *untreated* Manila fibre after same 2-week test shows jungle of spores whose "roots" feed on fibre, leaving it useless.

COLUMBIAN ROPE COMPANY
Auburn "The Cordage City", N. Y.
THE ROPE WITH THE RED, WHITE AND BLUE MARKERS

Atlas Diesel powers new "David Frances," a 64' 10" dragger equipped to fish both sides. Owner, Viking Fisheries Ltd., Lunenburg, N.S. Skipper, Capt. Edward Hansen.

Lowest final cost

sells another ATLAS DIESEL

Atlas Diesel, Model 35-S2-6 Continuous rating 195 B.H.P. at 1225 rpm

Viking Fisheries wisely chose a Model 35 Atlas Diesel to power the new "David Frances!" They know that after many years of the toughest work, Atlas Diesels will still be earning money! Their previous experience with Atlas' dependability and stamina for rugged dragger duty, proved convincingly they can count on an Atlas for extra years of the most economical and trouble-free performance . . . which in the long run, results in their *lowest final cost!* Fill your powering or repowering needs by following the example of profit-making owners who know through experience they can rely on Atlas or Superior Diesels for longer service life, smoother performance, lowest maintenance, fuel and lubrication costs! For every marine use requiring from 95 to 1765 B.H.P., there's an Atlas or Superior Diesel that will give you all these benefits. You can invest with confidence because the vast facilities of the White Motor Company are dedicated to carry on intensified research, development and precision manufacturing of Superior and Atlas Diesels. Get complete details today at the nearest sales and service office listed below.

Superior ENGINES · ATLAS Imperial DIESEL ENGINES · White DIESEL

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THE WHITE MOTOR COMPANY • *Plant and General Offices: Springfield, Ohio*

SALES AND SERVICE POINTS: Gloucester, Massachusetts • Houston, Fort Worth, Texas • San Diego, Terminal Island, California • Ketchikan, Alaska • Washington, D.C. • Portland, Astoria, Oregon • Casper, Wyoming • Halifax, Nova Scotia • Vancouver, B.C. • Park Rapids, Minnesota • New York • Chicago • Seattle • New Orleans • St. Louis

B.F. Goodrich

3200 Spongex floats do the work of 7000 conventional floats on this 9 ton net

3000 Spongex Floats celebrate their 5th birthday

After 5 seasons' experience with over 3000 Spongex® seine floats, Capt. C.H. Clark, fishing supervisor for Nelson Bros. Fisheries, Vancouver, B. C. and captain of their 122 ton flagship "Western Producer", says,

"I'm convinced Spongex floats are a major improvement over what we've had in the past. The floats on my net have been in service for five seasons and they look practically new. With conventional floats, I'd have started on the third set by now. Furthermore, corks absorb water, lose buoyancy—take valuable time to dry out. This doesn't happen with Spongex floats—they absorb virtually no water at all.

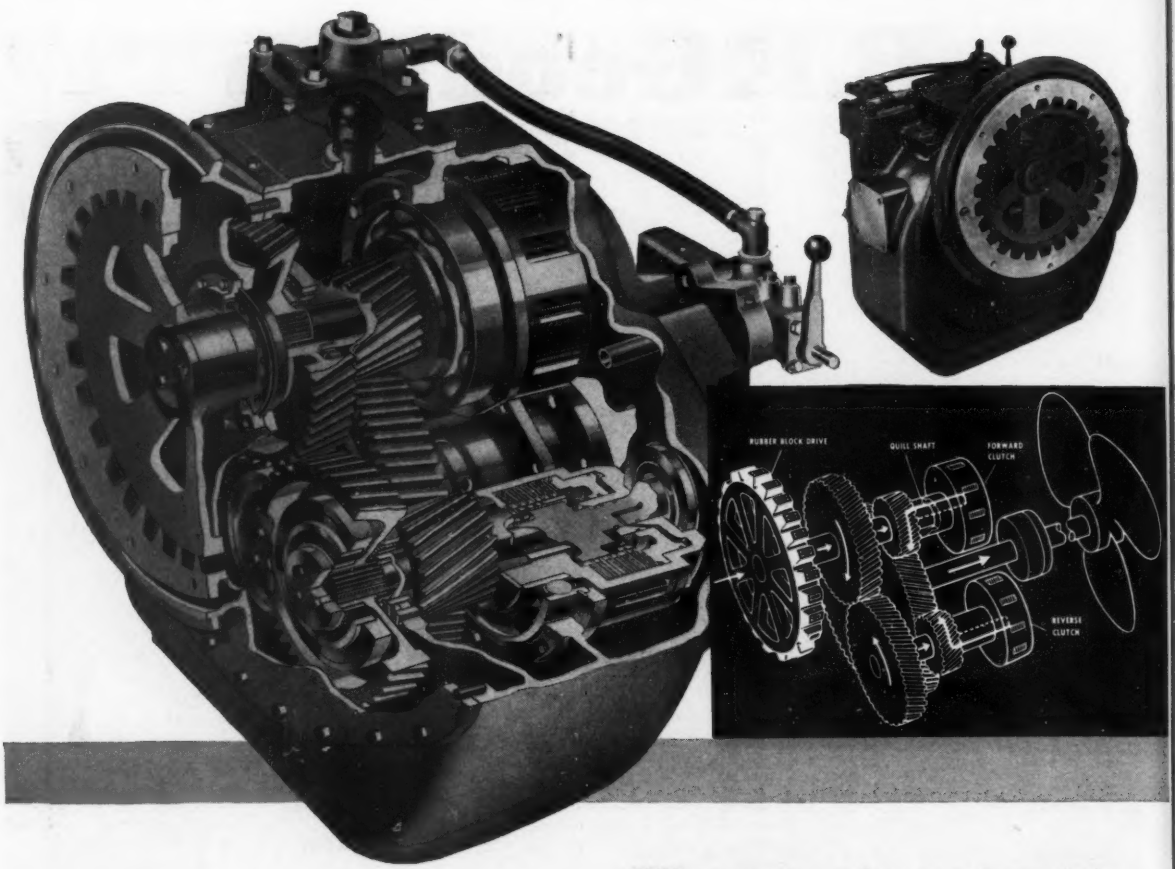
"Another real advantage is a 1500 lb. reduction in total weight. This means lighter work for the crew and with the net carried on the stern a difference of about 5 tons in capacity of any bulk fish."

As fishing supervisor, Capt. Clark says, "Ultimately the entire fleet will be equipped with Spongex floats."

Since the oval floats have been in service, B.F. Goodrich has developed a cylindrical shaped float in 12 sizes from 3" x 1½" to 6" x 7½". Generally, these floats are believed to be even better than the original ones.

Whichever float shape you prefer, your fishing operation will benefit. Write for information and prices to the address below.

B.F. Goodrich
SPONGE PRODUCTS DIVISION
DERBY PLACE SHELTON, CONNECTICUT



NEW answer to marine power transmission . . .

Twin Disc MG-511 Marine Gear!

Designed specifically for today's high speed, high horsepower marine engines, the new Twin Disc Model MG-511 Marine Reverse and Reduction Gear is the answer to marine power transmission for engines up to 240 continuous horsepower at 2100 rpm.

One of the outstanding features of the new MG-511 is its *extreme compactness*. It has an unusually short length of only 17⅛" from the SAE housing flange to the output propeller shaft flange!

Twin Disc Rubber Block Drive is used to transmit power to the gear. This tough, time-tested drive withstands normal misalignment conditions without imposing undue loads or stresses on the marine gear or the engine crankshaft.

Two *oil-actuated, oil-cooled,* multiple plate clutches are not only *actuated* by oil, but oil is *pumped* into the heart of each clutch. This *flood of oil* carries away heat, assures smooth engagements and substantially reduces clutch plate wear.

The MG-511 is also designed to facilitate easy servicing. The clutches and pump are so arranged that removal of a few screws is all that is necessary to make them easily accessible for simple, speedy servicing when necessary.

Other important features of particular interest are: fingertip control, full horsepower operation in both forward and reverse, and all gears straddle-mounted on anti-friction bearings.

If your boats are in the 100 to 240 hp, 1000 to 2100 rpm range, get complete information *now*, on the new Twin Disc Model MG-511 Marine Reverse and Reduction Gear. Write *today*, to Twin Disc Clutch Company, Racine, Wis. Request Bulletin No. 307.

TWIN DISC

TWIN DISC
Marine Gears

TWIN DISC CLUTCH COMPANY, Racine, Wisconsin (Hydraulic Division) Rockford, Illinois

March 1956 Vol. 37 No. 2

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NATIONAL FISHERMAN

The Fishing Industry Magazine

Formerly Atlantic Fisherman, Established 1919.

International Policy on Territorial Waters Needed

United States Senators and Congressmen have become greatly concerned over reports of action taken on the territorial waters issue at the recent meeting of the Inter-American Council of Jurists in Mexico City.

According to the National Fisheries Institute, the Mexico City meeting adopted a resolution which contained very sweeping proposals supporting the claims of some Latin-American countries which are now attempting to establish sovereignty over waters as much as 200 miles off their coasts. The U. S. representatives at this meeting made a strong statement not only opposing the content of this resolution, but objecting strongly to the fact that it was adopted with virtually no preparatory study, discussion or consideration of United States opposition.

Congressman Thomas S. Gordon of Illinois, chairman of a House Foreign Affairs subcommittee, has urged the State Department to defend vigorously the U. S. position in regard to freedom of the seas. Several of the Latin-American nations claim that their territorial waters extend far beyond the three-mile limit recognized by the United States.

Next to the Latin-American countries in extent of territorial waters claimed is South Korea, where the Rhee line is some 50 miles from the coast. It lately has been reported that Japanese patrol boats are escorting their fishing craft across the line and warning them of the approach of South Korean warships.

Norway announced recently that its Navy had seized 13 Russian fishing trawlers in Norwegian waters. Feeling among Norwegian fishermen is running high, and they point out that Russia claims a 12-mile territorial limit as against Norway's 4-mile limit.

The Scandinavian countries generally claim a 4-mile limit. In addition, they have adopted the principle of claiming as part of their territory all waters within a straight line drawn from headland to headland, which in some cases amounts to 27 miles.

These and other territorial waters claims have been the subject of discussion by the International Law Commission of the United Nations, which recently published its report. This report contained some draft articles which were put forth for the consideration of Governments, concerning the regime of the territorial sea. After referring to the fact that International practice is not uniform concerning the traditional limitation of the territorial sea to 3 miles, the Commission goes on to state definitely that there is no justification for any extensions beyond 12 miles, and that such extensions are contrary to International law. Between 3 and 12 miles the matter is left more or less open, although it is stated that International law does not require States to recognize a breadth beyond 3 miles.

In view of the worldwide confusion as to what constitutes the breadth of territorial waters, it would seem that some uniform International policy should be agreed upon. Harmonizing of the different views and the adoption of standard limits for territorial waters at a diplomatic conference, as suggested by the International Law Commission, would be a good solution to the problem.

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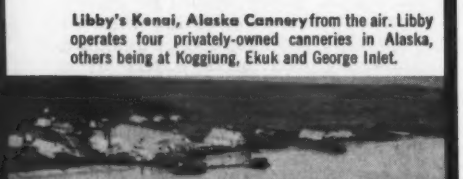
ALL PHOTOS COURTESY LIBBY, MCNEILL & LIBBY FOOD PRODUCTS, SEATTLE, WASHINGTON.

Libby Chooses Chrysler Marine

Libby's Kenai, Alaska Cannery from the air. Libby operates four privately-owned canneries in Alaska, others being at Koggiung, Ekuk and George Inlet.



Consolidated Cannery at Moser Bay, Alaska makes startling aerial view nestling alongside mountain slope. In addition to Moser Bay, Libby is associated with other canners in the operation of canneries at Egegik, Craig and Petersburg, Alaska.

"Libby" is a familiar name to every housewife. Equally well-known among commercial fishermen is the company name "Libby, McNeill & Libby." Libby fleets number hundreds of boats of all types and sizes. Its Alaskan salmon fleet includes gillnetters, tugs, power scows, purse seiners . . . boats range from small 20-foot seine skiffs to 86-foot powered scows.

K. K. Kent, District Superintendent of Libby's Seattle operation, reports that as older engines of other makes are replaced, they are being replaced by Chrysler Marine Engines. Latest additions to Libby's salmon fleet are two 38-foot purse seiners, two 20-foot seine skiffs and twenty 32-foot gillnet boats, now being constructed and equipped with Chrysler Power in Seattle and Astoria.

Chrysler is proud of the widespread acceptance of its marine engines. The fact that Chrysler Marine Engines are so overwhelmingly preferred by successful commercial operators like Libby, McNeill & Libby is the best proof of their complete dependability,

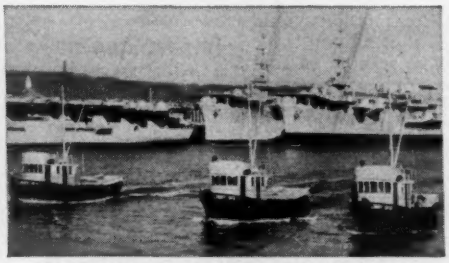
MARINE ENGINE DIVISION

Libby "21" on Lake Washington, Seattle. Libby "21" is a 37-foot wood purse seiner fishing for Moser Bay consolidated cannery. Power for "21" is supplied by a Chrysler Royal Marine Engine.

Power Scow "Otter" operates out of Libby cannery at Koggiung, Alaska. The 71-foot "Otter," a familiar sight around the Bristol Bay area, is powered with twin Chrysler Royals.

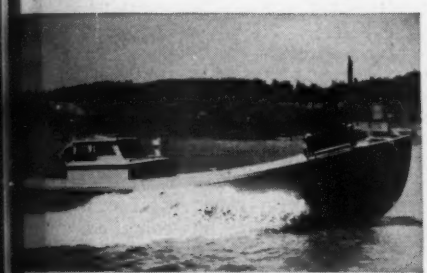
Libby Gillnetter "K-6" pictured during test run on Lake Union in Seattle. The 29-foot "K-6" fishes for Libby cannery at Kenai, Alaska and is powered with a Chrysler Crown Marine Engine. Fourteen of Kenai's gillnetters and work skiffs are Chrysler-powered.

Libby Cannery at Koggiung, Alaska is served by a fleet of thirty-eight boats powered with Chrysler Marine Engines.



Sweeping by the "Mothball Fleet" are Libby "9," "10" and "11" out for trial run at Tacoma, Washington. These boats are 44 footers, powered with Chrysler Royal Marine Engines. Libby "9" fishes for Craig consolidated cannery, "10" and "11" serve the Libby cannery at George Inlet, Alaska.

Libby "20" loaded to the gunwales, stern almost awash. 10,000 Alaskan pink salmon are aboard as boat comes into Uyak Bay. The Chrysler Royal-powered 35-foot Libby "20" fishes for consolidated cannery at Moser Bay. Twenty-seven Chrysler-powered purse and jitney seiners and tugs operate out of Moser Bay.



Full speed ahead for one of twelve identical 32-foot "Astoria Bow-Picker" type gillnetters operating out of Libby cannery at Koggiung, Alaska. All twelve are powered with Chrysler Crown Marine Engines for speed and dependability.

Berthed at Craig, Alaska consolidated cannery is the Libby "6," a 44-foot wood purse seiner. Libby "6" is powered with a Chrysler Royal Marine Engine.

Pursing in the seine net. Purse seiner demonstrates typical operation. Fish are surrounded by net which is then "pursed" shut by means of a cable running through rings attached to lower edge of net. As net is pulled tight, fish are crowded in and hauled aboard.

Power For Its Alaska Salmon Fleet

operating economy and superior performance.

Why not check the Chrysler Marine Engine line the next time you power or repower. From 95 to 250 horsepower, In-line 6 or V-8 – they are the most preferred marine engines in America today. See your Chrysler Marine Engine Dealer, or write for 1956 catalog: ***Dept. 123, Marine Engine Division, Chrysler Corporation, Trenton, Michigan.***

CHRYSLER CROWN
125 h.p. In-line 6 Marine Engine

CHRYSLER IMPERIAL V SPECIAL
200 h.p. V-8 Marine Engine

CHRYSLER *America's No. 1 Marine Engine*

CHRYSLER CORPORATION

FISHERY PROGRESS

Economic • Legislative • Technical

Independent fisheries commission has been proposed by Senator Warren G. Magnuson of Washington, chairman of Senate Committee on Interstate and Foreign Commerce. His bill will be cited as the Fisheries Act of 1956, and would create a 5-man U. S. Fisheries Commission. Senator Thomas Kuchel of California is a joint author with Senator Magnuson.

Each member of the U. S. Fisheries Commission would hold office for a term of 6 years, except that among those appointed the first time the terms will be rotated so that the Commission will consist of some experienced members at all times. The bill requires that at least 3 members shall have general knowledge of commercial and sport fishing conditions and problems confronting domestic and International fisheries.

The legislation transfers all functions pertaining to fisheries now exercised by Department of Interior, including food and game fish. It also transfers fisheries functions now exercised by Department of Agriculture and Department of Commerce. It provides that close cooperation shall be maintained by United States with Canada and between United States and Mexico through fisheries agreements for conservation and utilization of stocks of food fish and shellfish which inhabit waters of Continental Shelf.

Fishing vessel inspection would be required under H. R. 9047, which was introduced by Congressman O'Neill February 2. The bill would make all commercial fishing vessels subject to rules and regulations of United States Coast Guard marine inspection.

Congressional Sub-committees on Fisheries have been named recently. In the House, Congressman Herbert C. Bonner of North Carolina, chairman of Committee on Merchant Marine and Fisheries, has announced membership of Sub-committee on Fisheries and Wildlife as follows: Frank W. Boykin, chairman, Ala.; George P. Miller, Calif.; John C. Kluczynski, Ill.; John J. Bell, Texas; Irwin D. Davison, New York; John J. Allen, Jr., Calif.; Horace Seely-Brown, Jr., Conn.; William K. Van Pelt, Wis.; and A. D. Baumhart, Jr., Ohio.

The Senate Committee on Interstate and Foreign Commerce has named the following to serve on its Subcommittee on Merchant Marine and Fisheries: Warren G. Magnuson, chairman, Wash.; John O. Pastore, Rhode Island; Price Daniel, Texas; John M. Butler, Md.; James H. Duff, Pa.

Control over Alaska fisheries was discussed recently at hearings held on H.R. 244 and H.R. 8405 by House Committee on Interior and Insular Affairs. Interior Department witnesses objected to terms of bills, but offered a substitute, effect of which was to propose transferring at this time administration of game and game fish to Territory of Alaska, but to postpone transfer of commercial fisheries functions to Territory until later date. There seemed to be considerable doubt among witnesses and some members of Committee whether Territory of Alaska could adequately finance administration of commercial fisheries.

A Fisheries Stabilization Corporation, with the members of the proposed United States Fisheries Commission as the board of directors, is proposed in legislation introduced by Senator Warren G. Magnuson of Washington and Senator Thomas H. Kuchel of California. There also would be a Fisheries Advisory Board of nine members, of whom two would be fishing boat owners, two commercial fish processors, two commercial wholesalers of fish and fish products, one a representative of labor, and two representatives of the consuming public.

The Corporation would make loans to fishermen, boat builders, processors, marketers, and others for the purpose of increasing production and consumption of fish and shellfish and their products. It would have capital stock of $5,000,000, which would be subscribed for by United States, and it would have authority to issue bonds to obtain additional funds to carry out its functions.

Provision also is made in the bill for restrictions to be imposed upon imports into United States of fish and shellfish and the products thereof whenever it is found by the new Fisheries Commission that a peril point has been reached and there is serious injury or unreasonable hardship to the domestic commercial fisheries industry.

Import quotas would be provided under H. R. 8954 (Lanham), which was introduced into the House February 6. The bill is a revision of H. R. 7925 (Lanham), and includes some modifications to conform with actual import situations, such as importation of canned tuna. The base period for figuring import quotas on tuna is changed to read any three-year period since 1948.

Strong feature of Lanham bill is that Tariff Commission would be endowed with greater authority than heretofore, and in effect could rewrite all import duties. In addition, Congress would take over part of President's powers with respect to imports. Under provisions of the bill, the President would not be able to turn down a recommendation by the Tariff Commission for escape clause relief.

American Fisheries Advisory Committee will hold its third meeting on May 1 and 2 in Long Beach, Calif. Assistant Secretary of the Interior Wesley A. D'Ewart will serve as presiding officer during the meeting.

Chief objective will be to review status of current fishery research and development projects being financed by Saltonstall-Kennedy funds, and to discuss recommendations for next year's program. While in Long Beach-San Pedro area, the group will inspect local fishery activities.

Large increase in canned salmon imports from Japan was shown in November 1955 import data compiled by Fish and Wildlife Service. Imports of Japanese canned salmon amounted to 2,060,000 pounds during November, bringing total of these imports for first 11 months of 1955 to 3,276,000 pounds. In October, 956,000 pounds were received; in September, 254,000 pounds. Imports from Canada during same three-month period totalled 4,628,000 pounds, compared with 226,000 pounds in that period a year earlier.

Funds for Fish & Wildlife Service in fiscal year 1957, as voted by House on February 21, would be full amount of budget estimate.

Hearing on groundfish fillet imports has been announced by United States Tariff Commission. It will be held in Washington, D. C. on June 5, 1956. Parties interested will be given opportunity to be present, to produce evidence, and to be heard at the hearing. Such parties desiring to appear should notify Secretary of Tariff Commission, in writing, at least three days in advance of date of hearing.

Groundfish fillet imports into United States, including cod, haddock, hake, pollock, cusk, and ocean perch, totalled 15,475,350 pounds during January, 1956. Compared with imports during same month of last year, this was increase of 18%.

The gain was primarily due to considerably larger imports from Canada and Iceland, although less spectacular increases were noted from almost all of the other exporting countries as well. Canada and Iceland accounted for 91 percent of total January imports. Other countries exporting groundfish fillets to United States during first month of current year were Norway, Denmark, Netherlands, West Germany, and Greenland.

DOW

Moisture-resistant Styrofoam chosen again for boat insulation

The Minorcan is one of many 67′ x 18′ shrimp trawlers built by Diesel Engine Sales, Inc. of St. Augustine, Florida, using Styrofoam low-temperature insulation. The Minorcan is now owned by Mr. Henry C. Singleton.

In fleet after fleet, its remarkable combination of properties pays off in permanent insulation efficiency

It's easy to see why so many builders of fishing boats use Styrofoam® (a Dow plastic foam). It offers you a combination of properties that is unmatched by any other low-temperature insulation.

Because Styrofoam has superior resistance to water, its low "K" factor stays low. Styrofoam offers excellent compressive strength, light weight, permanent resistance to vermin and decay, low installed cost, and it won't pack or shift within the walls where it's used. These properties all combine to make Styrofoam the most economical, efficient, trouble-free insulation on the market today. In addition it offers top buoyancy—supports 55 lbs. per cubic foot. For your copy of the Styrofoam data book, contact Plastics Sales Department PL513J. THE DOW CHEMICAL COMPANY, Midland, Michigan.

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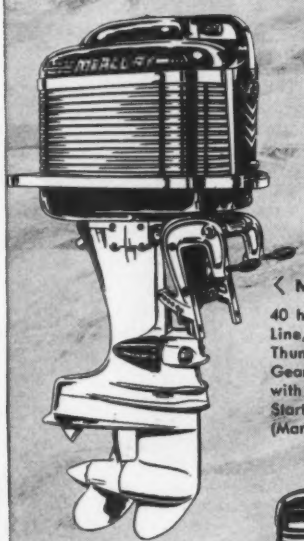
workhorse power!

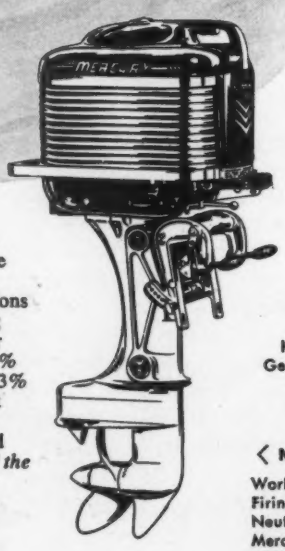
KIEKHAEFER MERCURY OUTBOARDS

outperform, outwork, outlast others



< MARK 55

40 h.p. 4 Cylinder in Line, Alternate Firing Thunderbolt Engine; Reverse Gear and Neutral. Available with Exclusive 12-volt MercElectric Starter and Generator (Mark 55E model)



MARK 25 ^

20 h.p. Alternate Twin Hurricane Engine; Reverse Gear and Neutral. Available with 12-volt MercElectric starter (Mark 25E model)

Terrific Fuel Savings!

Triple-checked tests with Mark 30 and competitive 30 h.p. outboard under identical operating conditions reveal Mark 30 delivering up to 25% *more* miles per gallon, Motor X using 15% *more* fuel per hour and 33% *more* oil per gallon! That means the Mark 30's operating economy could save you the *entire cost of the motor* in 60 days of continuous operation!

< MARK 30 *Turbo Four*

World's *First* 30 h.p. Alternate Firing Four; Reverse Gear and Neutral. Available with 12-volt MercElectric Starter and Generator (Mark 30E model)

Take the worst weather old Mother Nature can dish out . . . the toughest going an outboard can face! Mercurys have *proved* their ability to take it — in the country's most grueling outboard marathons and in punishing heavy-duty work boat operations the world over!

Only advanced Kiekhaefer engineering gives you Full Jeweled Power — ball and roller bearings throughout — for less power loss through friction, more power delivered to the prop, a longer lifetime of fast starts and operating economy. Mercury Vari-Timed Valves provide correct valve opening and timing at all speeds . . . waterproofed magneto and spark plugs enable Mercury to shrug off bad weather, keep those payloads going.

Your Mercury dealer will show you many other exclusive Mercury features that make Mercury first choice for working horsepower. Look him up in the yellow pages of your phone book now!

Write for FREE Illustrated Catalog

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WICKWIRE ROPE DISTRIBUTORS WEAR MANY HATS

Wickwire Rope distributors are men who wear many hats. They are at home in the headgear typical of the numerous and varied industries they serve—the marine and fishing trades, the oil fields, construction, logging and many other industries having specialized wire rope needs.

These men aren't hat models—they can wear these hats because of their long experience in the industries they serve. Add to this their intimate knowledge of local conditions and their comprehensive Wickwire Rope stocks, and you'll see that your Wickwire Rope distributor is the man who can be of great help to you.

Yes, your Wickwire Rope distributor is a good man to know. He's quality people handling quality products. Buy your wire rope and wire rope slings from him. You'll find that the many valuable services he offers far outweigh any apparent price advantage you might gain by buying direct.

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A PRODUCT OF THE COLORADO FUEL AND IRON CORPORATION

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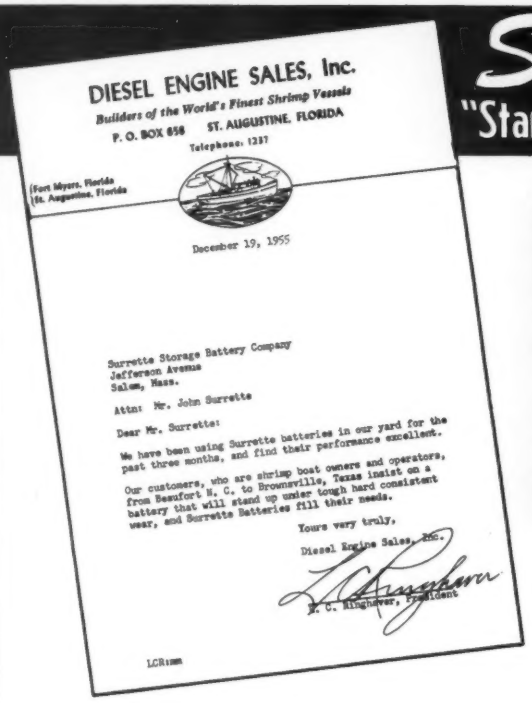
"Stand Up Under Hard Consistent Wear"



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Builders of the World's Finest Shrimp Vessels
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Telephone: 1237
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(St. Augustine, Florida

December 19, 1955

Surrette Storage Battery Company
Jefferson Avenue
Salem, Mass.

Attn: Mr. John Surrette

Dear Mr. Surrette:

We have been using Surrette batteries in our yard for the past three months, and find their performance excellent.

Our customers, who are shrimp boat owners and operators, from Beaufort N. C. to Brownsville, Texas insist on a battery that will stand up under tough hard consistent wear, and Surrette Batteries fill their needs.

Yours very truly,

Diesel Engine Sales, Inc.

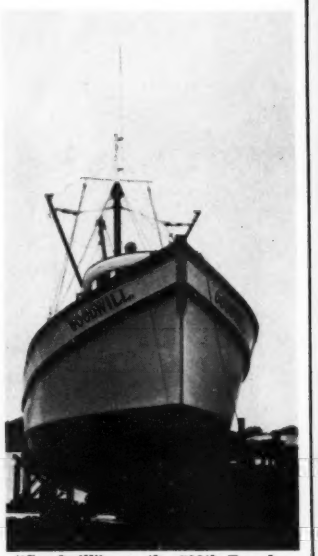
L. C. Ringhaver, President

LCRimm

Mr. L. C. Ringhaver, Pres. of Diesel Engine Sales, Inc. chose SURRETTE BATTERIES as standard equipment at his yard because . . . in his own words . . . "Our customers who are shrimp boat owners and operators insist on batteries that will stand up under tough, hard consistent wear and SURRETTE BATTERIES fill their needs."

Mr. Ringhaver's kind words are not unusual. From owners and builders from Maine to Florida we get the same reports . . . "their ruggedness and long life makes them the least expensive batteries to use." . . . "our experience proves Surrette's reputation for greater dependability".

Benefit by the experience of leading builders such as Mr. Ringhaver of Diesel Engine Sales . . . choose SURRETTE for your next set of marine batteries.



"Goodwill" was the 500th Trawler built by Diesel Engine Sales, Inc.

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Ideas for Lowering Boat Insurance Costs

Jerome Sachs* believes reasonable Government standards for building and maintaining fishing vessels would reduce losses and insurance rates

THE general situation of rising insurance costs on fishing boats, with increased reluctance on the part of the insurance companies to provide the needed protection, has become acute within the fishing industry. The few insurance companies which have remained in the fishing vessel insurance market reportedly have raised their premiums, increased the use of deductibles, and imposed more restrictive coverage. The vessel owners affected are complaining that the insurance coverage has become inadequate and its cost prohibitively expensive.

The experience of insurance companies in their commercial fishing vessel business has been discouraging in recent years, and has caused many of them to get out of the market and others to keep out. Rising costs have beset the fishing industry as regards construction of vessels, repairs to vessels, fishing gear and nets, fuel, wages to crews, etc. Furthermore, court awards to fishermen in personal injury claims have increased sharply. Both the rise in fishing vessel construction and operation costs and the increase in personal injury awards are reflected in the increased claims that insurance companies have been called upon to pay.

About one-fourth to one-third of all of the more important cases of assistance rendered by Coast Guard operational units to all types of vessels in all sizes are estimated to have involved assistance to commercial fishing craft. About one-half of the fishing vessels assisted by the Coast Guard in 1955 were above 30 tons burden or above 40 feet in length.

A very rough estimate of the situation places a range of about one-fourth to one-third of the accidents, such as founderings, strandings, fires, collisions, etc., as due to undetermined causes; somewhat less than one-fourth of the accidents are attributed to heavy weather; a range of about one-half to two-thirds are attributed to personnel and material failures.

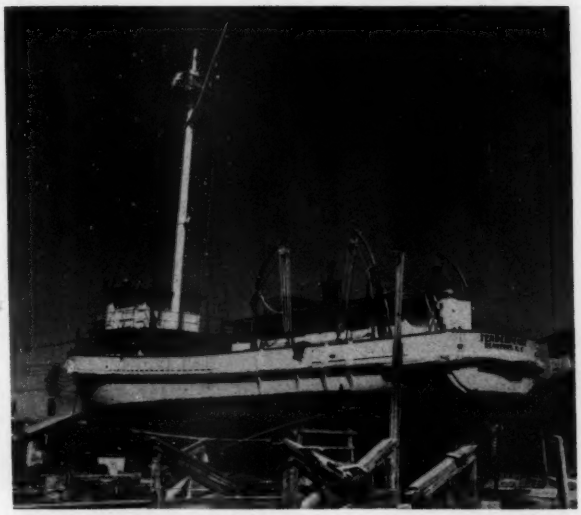
Some insurance companies, with their losses in recent years in mind, are now insisting on a complete physical survey of the vessel by a marine surveyor. The survey made also covers navigation, fire fighting and lifesaving equipment. These inquiries have on occasion included checking on the general reputation of the operating personnel.

Accident Prevention

The nature of insurance is such that it requires the utmost good faith between the parties. The so-called Sue and Labor Clause which appears in every marine insurance policy means in substance that in dealing with an accident or with a loss, the insured vessel owner should act as if he were uninsured. Insurance companies like their policyholders to be not only men of good faith but cautious and careful. It has been said that the best safety device after all is a careful man.

Insurance company figures show that in the case of menhaden fishing vessels the underwriting losses over the last few years have been clearly better than the losses suffered on other classes of fishing vessels. It appears evident that menhaden vessel owners have been doing a good job in the accident prevention field.

The practical question which those interested in the general welfare of the fishing industry and more specifically in its insurance difficulties have to face up to, is what should be done to get vessel owners to maintain the vessel, its fixed equipment and safety equipment, in as good condition, let us say, as the fishing gear. What courses of action should be taken in an effort to reduce accidents and thereby the losses of insurance companies? Are corrective regulatory safety measures needed? What should be done to keep down court awards in personal injury actions by members of the crew?



97' menhaden vessel "Tenderheart" on the railway of Morehead City (N.C.) Shipbuilding Corp. She is owned by Elmer Willis of the Tenderheart Fish Co., Williston, N. C., and is powered by a 400 hp. Atlas Diesel.

One suggestion that has been made is that Congress should take fishermen out of the Jones Act and enact a fishermen's compensation act to parallel the workmen's compensation legislation that governs the amounts paid for death and injuries to workmen in industrial plants on shore. This would be a statutory approach to fixing a ceiling on amounts paid for death and injuries to fishermen.

With the recent losses in mind, there has been some feeling within the insurance industry that the so-called American Institute Time Hull Form, which is used for large oceangoing tonnage, is not a restricted enough form for small fishing vessels and that it never was designed for small tonnage.

Inspection of Boats

Another method for dealing with the problem that has been mentioned is that commercial fishing vessels should be made subject to Government construction and maintenance standards with periodic inspection and certification by recognized surveyors, and that sea-going personnel on fishing vessels also should be made subject to official qualification standards. The aim of these official standards would be to see to it that the commercial fishing vessel is seaworthy, properly equipped for safe navigation, properly equipped with firefighting apparatus and lifesaving gear, and properly manned. This course of action would have fishing vessels made subject to the same regulations, more or less, as passenger and cargo vessels.

At present, fishing vessels are subject only to the requirements of the Motorboat Act administered by the Coast Guard. Those motorboat regulations are limited to requiring compliance with certain rules concerning navigation lights, fire extinguishers and lifejackets and apply to all motorboats under 150 tons which are not licensed to carry passengers. In sum total, they are the same rules as those which apply to small pleasure craft, although the Motorboat Act also contains a few other special provisions

(Continued on page 40)

* Excerpted from an address given by Mr. Sachs, who is director of the insurance staff, Bureau of Foreign Commerce, at the recent convention of the Virginia Fishermen's Association.

Victor Gonzales, president of Star Fish and Oyster Co., Mobile, Alabama; and the 75' "Lisa G.", latest addition to the firm's fleet.

Snapper Schooner "Lisa G." Joins Star Fleet

THE first snapper schooner to be built in Biloxi, Miss. in over 25 years slid down the ways of the Covacevich Shipyard during the latter part of January. She is the 75' *Lisa G.*, constructed for the Star Fish and Oyster Co. of Mobile, Ala., who are reported to be the largest shippers of red snapper in the world.

The trim new schooner brings the number of vessels in the Star Company's snapper fleet to eight, and replaces the *S. Gonzales* which was lost with one crewman in May, 1955. The new vessel, which has large fishing reels fitted into the rails, left Mobile the last week in February for fishing on the Campeche Banks.

The *Lisa G.* is named for the youngest daughter of Arthur Gonzales, who is vice-president of the Star Company. His brother, Victor, is president. The Gonzales family has a background of 56 years of snapper fishing. Star Company was founded by the late Sebastian Gonzales in 1900, and is noted for its contributions to the snapper industry.

The new fishing smack *Lisa G.* was built from designs of the Covacevich Company, and is skippered by Capt. Ted Leiser of Fairhope, Ala. She has a beam of 20 ft., draft of 10 ft. and fish hold capacity of 23 tons. There are 11 bunks, with 6 in the fo'c's'le, 4 in the after cabin and 1 in the pilothouse.

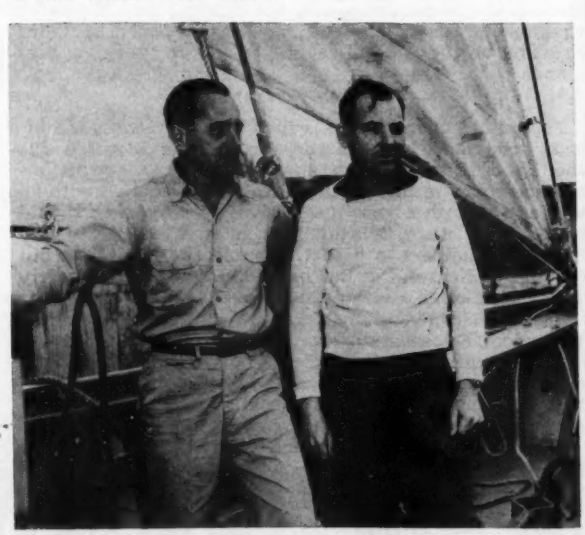
The keel of the *Lisa G.* is of pine, measuring 9 by 12. The center keelson is 7 x 9 pine. Bilge stringers are 4 x 10, run from stem to stern and are bolted with ½ inch galvanized carriage bolts. The stem is 10 x 16 cypress, and the stern post is 10 x 12 oak from bottom of keel to top of deck beams, with 10 x 12 knees for braces, bolted with ¾" galvanized rod iron.

Framing is cypress doubled 2¼" x 6" on 18" centers. Two inch cypress heart planking is nailed to the frame with galvanized boat nails. Clamps and shelf clamp are 3 x 6 cypress and bolted with ½" galvanized carriage bolts. Other specifications are deck beams, 4 x 12 pine bolted with ½" galvanized carriage bolts; hatch coaming and fo'c's'le, 5 x 12 pine; bulwark, 1 x 4 T&G mahogany; stanchions, 4 x 5 cypress. The boat is ceiled inside with 1½" by 6 ceiling, and is decked with 2" x 3" heart pine. Two coats of Kop-O-Seal cover the inside, while Henderson and Johnson paint was used on the bottom and topsides.

Power for the *Lisa G.* is furnished by a 165 hp. General Motors Diesel with 4½:1 reduction gear, which gives her a speed of 10 knots. The engine drives a 4-blade, 48 x 34 Coolidge propeller on 3" stainless steel shaft, with Goodrich Cutless stern bearing. There is a 750-watt generator, 1½" Jabsco pump and four 8-volt batteries. A Link-Belt clutch is provided for the winch, which is driven by a 6 hp. gasoline engine.

Pilothouse equipment includes an 8 inch Wilfrid White compass, 75-watt Raytheon radiotelephone and a Raytheon recording "Fathometer". The *Lisa G.* carries three C-O-Two fire extinguishers, and is rigged with Cating cordage. Her sails were made by A. H. McLeod Co. of Mobile.

The galley range is a Shipmate oil-burning model, and fresh water on the schooner is stored in four 500-gallon tanks, while a fuel oil capacity of 2500 gallons is provided in two welded steel tanks.



Capt. Ted Leiser of Fairhope, Ala., left, skipper of the new snapper schooner "Lisa G.", and Richard Gonzales, secretary of Star Fish & Oyster Co., owners of the vessel.

Larger Trolling Lures Catch Bigger Salmon

Studies by Fisheries Research Board of Canada show plugs and spoons also are selective as to species

TROLLING lures are selective for both species and size of salmon. In recent Canadian studies, a greater number of spring and coho salmon were caught by spoons than by plugs, but the plugs appeared to be more effective than spoons in capturing fish of different sizes. These relationships are probably closely associated with the size and type of food being eaten by the salmon at the time of capture.

Trolling is one of the oldest methods of capturing salmon on the Pacific Coast. It is essentially a longline method in which several weighted lines bearing numerous lures at different depths are dragged through the water at a slow speed. Of the five species of Pacific salmon, only the spring and coho readily strike at these moving lures, since they feed more heavily on a fish diet.

During a recent study of spring and coho salmon in the ocean feeding areas off the southwest coast of Vancouver Island, information was collected by the Pacific Biological Station of the Canadian Fisheries Research Board, on the size and species of fish caught by a few types of trolling lures commonly used in commercial salmon fishing. From June 29 to August 2, 1953, four types of trolling lures were fished at various depths, including a large plug—Rex Field, Model 49, 7-in., painted yellow and blue; small plug —Rex Field, Little Doug, 5-in., painted yellow and blue; large spoon—McMahon, 7-in., brass; and small spoon—Gibb's Egg Wobbler, No. 2, brass. These were fished from a chartered trolling boat, with four lures of the same type spaced 5 fathoms apart on each of four separate lines.

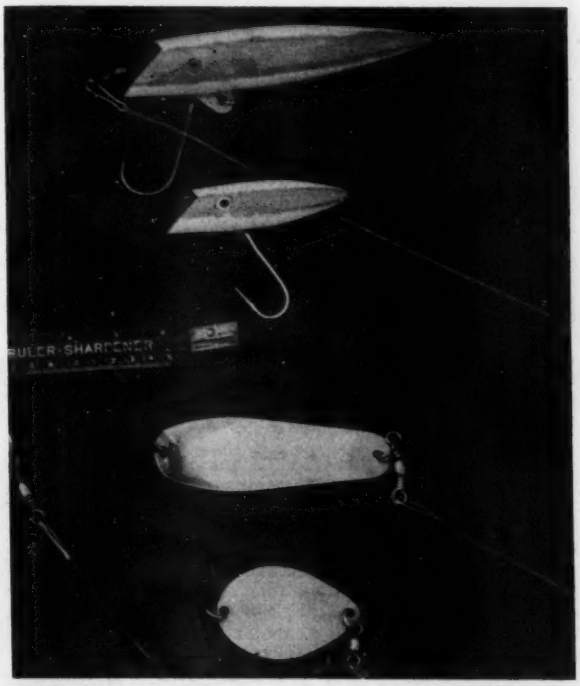
In the experiments by the Canadian Fisheries Research Board, the depth was recorded at which each fish was caught by measuring the angle and length of line out. The depth was usually between one-half and two-thirds of the length of the line. The coho salmon were taken at depths varying from 5 to 10 fathoms (most at 5) while the spring salmon were taken at depths between 10 and 15 fathoms (most at 15). The length of each fish was measured and the stomach contents were kept for examination.

The results of the lure selection for size and species of fish are presented in Table I.

TABLE I—The number and size of coho and spring salmon caught by four different trolling lures.

	Type of lure				
	Large spoon	Small spoon	Large plug	Small plug	Total
Coho salmon					
Number of fish	20	27	2	5	54
Percentage by number	37	50	4	9	100
Average fork length in cm.*	62	61	65	57	—
Percentage by weight†	39	49	5	7	100
Spring salmon					
Number of fish	35	30	20	12	97
Percentage by number	36	31	21	12	100
Average fork length in cm.*	66	58	72	60	—
Percentage under 26 in., total length	34	53	10	58	—
Percentage by weight†	34	21	36	9	100

*2.5 cm. = approximately 1 in.
†Weights estimated from the lengths of individual fish.



The four types of trolling lures used in the Canadian studies. From top to bottom: Large Plug—Rex Field, Model 49, 7 in., painted yellow and blue; Small Plug—Rex Field, Little Doug, 5 in., painted yellow and blue; Large Spoon—McMahon, 7 in., brass; and Small Spoon—Gibb's Egg Wobbler, No. 2, brass.

In the case of coho salmon, the spoons were much superior to the plugs, and in each type the smaller lure was preferred. In other words, the small spoon caught the most coho salmon, the large spoon caught about four times as many fish as the small plug, and the large plug caught the least. Since all the coho salmon were maturing in their third year, the range in fork length was limited to 19.7 and 28.4 in. For this reason the length of fish was not markedly selected by the different lures, and the percentages of the total catch by number and by estimated weight did not differ much for each type of lure. However, the same tendencies that were shown for spring salmon were suggested; namely, that the larger lures catch larger fish and that the plugs are more selective for size of fish than the spoons.

Spring Salmon Prefer Larger Lures

In spring salmon, the spoons also caught more fish than the plugs, but the larger lure was preferred in each type. The spring salmon varied in both age and maturity, and the fork lengths ranged from 13.8 to 36.2 in. It is apparent from the differences in the average lengths that the size of fish was selected by the size and type of lure. Thus the large spoon caught both more and larger spring salmon than the small spoon, and the large plug caught both more and larger fish than the small plug. The large plug caught the greatest percentage of spring salmon by weight, even though a greater number of fish were caught by both sizes of spoons. This was possible because the large plug caught mainly large spring salmon, with only

(Continued on page 35)

Extending Keeping Time of Fish with Antibiotics

New method now under development would allow fishermen to stay at sea longer by using chemical ice for stowing fish

ANTIBIOTICS could extend the freshness of fish up to 100 percent or more and their use would permit a longer interval between catch and consumption, the New England Fisheries Technologists were told last month at a meeting in Boston. It was pointed out that antibiotics not only would allow fishermen to stay at sea longer and obtain greater quantities of fish, but also would maintain the quality of fish when sold. This would permit shipments for longer distances and open up new markets for fresh fish, the technologists were told.

As yet the Food and Drug Administration has not approved the use of antibiotics with fish, although last Fall approval was granted for use of one company's patented antibiotic compound with poultry. Scientists claim that any antibiotic residue which might be present in fish would be completely destroyed early in cooking, and therefore the pharmaceutical firms hope to have permission soon to put their antibiotics to use in the fishery industry.

The New England Fisheries Technologists were told by Dr. Alex Malaspina of the Technical Service Department of Chas. Pfizer & Co., Inc., that antibiotic treatment should start immediately after the fish are caught. Dr. Malaspina explained that the flesh of healthy fish, although normally bacteriologically sterile, is quickly contaminated by the bacteria in slime or viscera. He suggested various methods by which fishermen and processors could use antibiotics to advantage: dipping the fish in small concentrations of the antibiotic just before icing; using antibiotic-ice, or using refrigerated salt water containing the antibiotic. "Of the three," Dr. Malaspina said, "the use of antibiotic-ice seems the most convenient and practical method."

Numerous investigators, Dr. Malaspina disclosed, have concluded that a broad spectrum antibiotic, such as Biostat, is most effective in extending the freshness of fish. This type of antibiotic is not lethal to the bacteria, but merely inhibits their growth and development.

The low levels of Biostat, or other broad spectrum antibiotics that could be used for extending freshness of fish, would in no way affect the color, texture, flavor or odor, Dr. Malaspina stated. Antibiotic compounds such as oxytetracycline and chlortetracycline, which are active against a large number of bacteria, are said to have a broad antibacterial spectrum.

Methods of Applying Antibiotics

The practice of storing fish on boats or on shore in refrigerated salt water has been applied to some extent in the tuna industry. When a large load of fish is introduced into a tank of salt water, bacterial spoilage easily may develop; the bacteria will find a favorable environment in the solution contaminated with fish blood and proteins. However, a quantity of about 1 ppm. of a broad spectrum antibiotic added to the salt water is inhibitory to the bacteria, Dr. Malaspina said, and the fish may remain fresh for extensive periods of time.

A second procedure for adding an antibiotic is to dip the fish very briefly in a 50 to 100 ppm. solution of antibiotic just before icing, to inhibit the surface bacteria. However, this method may not be very practical under present commercial conditions, Dr. Malaspina stated.

The third and most practical method of employing an antibiotic is to incorporate it in the ice used for stowing fish. The quantity of the antibiotic in the ice should be about 5 ppm. This level may be increased or decreased somewhat depending on the species of fish, the method of handling (whether or not the fish is eviscerated), the time of the year, the average storage time on board the vessel, and the intended use of the fish (whether it is to be transported inland or is to be frozen).

"Finally," Dr. Malaspina stated, "it seems probable that by combining the method of dipping the fish briefly in an antibiotic solution with that of storage under antibiotic-ice, maximum bacterial inhibition may be accomplished."

Icing the "Richard & Arnold", a 52' fishing boat owned by Anthony Thomas of Provincetown, Mass. She is powered with a D13000 Caterpillar Diesel.

He revealed that antibiotics are more effective against bacterial spoilage in eviscerated fish than in non-eviscerated whole fish, since they cannot penetrate the flesh sufficiently to be able to combat the bacteria inside the viscera.

Storage of Redfish in Antibiotic-Ice

Dr. Malaspina pointed out that in redfish (ocean perch) bilgy odors may develop if the storage of this fish is prolonged and if icing is improper. These odors are disagreeable and account for substantial losses, he said. Canadian investigators have demonstrated that the bilgy odors are due to anaerobic bacteria which require little or no oxygen.

An experiment conducted at an independent laboratory has demonstrated that storing redfish under Biostat-treated ice is a very effective method of inhibiting anaerobic bacteria. Upon their arrival on shore, two days after catch, the experimental redfish were treated with antibiotic-ice. The anaerobic count after seven days of storage was 24,000 for the oxytetracycline-treated fish and 600,000 for the control fish stored under regular ice. After 14 days, the count was 39,000 for the treated and 6,900,000 for the untreated fish.

(Continued at bottom of next page)

Hatteras Trawler "Theresa R." Designed for Fishing in Waters off New England

THE Morehead City (N. C.) Shipbuilding Corp. has delivered its first Hatteras Trawler especially designed for dragging in the waters off New England. She is the 68' *Theresa R.*, which was built for Capt. Joseph Rego, who sailed the vessel to her home port of New Bedford, Mass. for rigging and fitting out.

The *Theresa R.* has a 19' beam and draws 7½' of water. She has 10 x 12 inch oak keel, rabbeted out on each side to receive the garboard plank. A 5 x 10 inch oak shoe runs the full length of the keel, extending beyond the stern post for the rudder shoe.

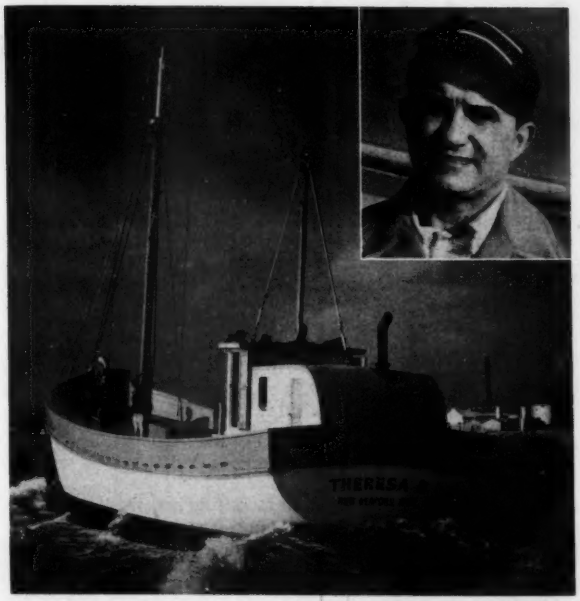
The stem of the new trawler is of one piece, 8 x 12 inch white oak, bolted to the forefoot knee with ¾ inch galvanized carriage bolts. The forefoot is fastened to the keel with the same size bolts. The keel and stem are rabbeted to receive 2 inch planking.

The vessel's deadwood, shaft alley, stern post and horn timber are cut from 10 x 10 inch oak. These are bolted with ¾ inch galvanized carriage bolts and ¾ inch drift rod. The rudder is built of 4 inch oak. The rudder stock, fastenings and rudder casing are of bronze, while the stuffing box is brass, and the quadrant is galvanized.

The floor timbers are cut and molded to shape from 4 x 10 inch heart pine and bolted through the keel with ¾ inch galvanized carriage bolts. The frames are steam bent to shape from 2½ inch x 4 inch white oak, with lengths to suit each station, and are spaced 12 inches from center to center. They are bolted to the floor timbers with two ½ inch carriage bolts, port and starboard. The top clamp and beam shelf are constructed of two pieces of 2 x 6 inch Southern pine, and one piece 4 x 4 inch oak. There are three sets of lower clamps on each side.

The boat's planking is of full 2 inch heart pine, fastened with galvanized boat nails, which are countersunk. The deck beams are molded from 4 x 8 Southern pine, spaced 12 inches from center to center and bolted through the oak beam shelf with ½ inch galvanized carriage bolts and one ⅝ inch drift bolt down through the top clamp and beam shelf. The decking is 2 inch heart pine. All seams are caulked with Woolsey's seam compound. Deck nails are countersunk.

The deckhouse on the *Theresa R.* contains two rooms, and is placed aft. The wheelhouse is 5' long, with round front, and has five windows and two doors. The Captain's quarters are 7' long with four windows. The house is built on a trunk deck, 26 inches high at the front end, and is covered with white canvas. The windows are weatherstripped and tight.



Stern view of "Theresa R.", first Hatteras Trawler built by the Morehead City (N.C.) Shipbuilding Corp. especially for fishing off New England. This 68' boat is owned by Capt. Joseph Rego (inset) of New Bedford, Mass. She is powered with a 6-110 General Motors Diesel.

The mainmast on the *Theresa R.* is of 8 inch, heavy duty pipe, while the aft mast is of 4 inch standard pipe. The pads for connecting up the rigging reach all the way through the pipe and are welded on each side. Rigging stays are of ⅞ x ¾ inch galvanized boat rod and cable.

The *Theresa R.* is powered by a 6-110 General Motors Diesel with 4½:1 reduction gear. The boat has two 1050-gallon fuel tanks, constructed of ¼ inch black steel, with two 3/16 inch steel swash plates to each tank, one running fore and aft and one thwart. The fuel tanks are electric welded and fully tested. The vessel's 150-gallon fresh-water tank is located under the forepeak floor. It is constructed of 3/16 inch steel and painted with zinc dust.

(Continued from previous page)

In preparing frozen fish, the fillets usually are dipped in a brine solution before the freezing operation. This brine becomes contaminated rapidly with bacteria which then are carried away on the surface of the fillet. To avoid this problem and to obtain a high quality product, it might be very beneficial to add an antibiotic to the brine at about 5 ppm., Dr. Malaspina declared. No change in processing would be required, he said, and it might not be necessary to change the brine so often.

The process of freezing fish at sea and then thawing them on shore for filleting prior to refreezing is a method which may find wide application in the future. It is believed that the addition of an antibiotic to the water used for thawing the fish on shore, in order to inhibit the rapid bacterial growth during and after thawing, might be of considerable advantage.

In the processing of menhaden, bacterial decomposition is a serious problem. The losses may amount to between 10 and 20%, and are especially heavy in warm weather. Chemical agents, such as formaldehyde and nitrates, have been investigated but these have proved relatively ineffective; the addition of a broad spectrum antibiotic to menhaden would inhibit deterioration, it is claimed.

Canada to Regulate Net Mesh on Newfoundland, Nova Scotia Banks

Regulations governing mesh sizes in nets used by Canadian fishing trawlers and draggers in certain areas of the Northwest Atlantic will go into effect on January 1, 1957. The Sub-areas to be affected by the new Canadian regulation are numbers 3 and 4. Number 3 takes in the Newfoundland fishing banks and waters adjacent to that province, and number 4 covers Nova Scotian waters, the Gulf of St. Lawrence and the Bay of Fundy.

The mesh size in Sub-area 4 is to be a minimum of 4½ inches, similar to that already in effect in Sub-area 5; but in Sub-area 3 a 4-inch mesh size will be permitted. This is because scientific investigation has shown that the stocks of fish in each of the Sub-areas are separate.

It has been demonstrated that the larger mesh sizes release as much as half the small haddock formerly wasted at sea, with negligible loss of fish of marketable size. Wastage of small cod at sea is less serious than that of haddock, but as much as 25 percent by number have been discarded in some years in the Gulf area.

Great Lakes Men Named to International Commission

Lester P. Voigt, director of the Wis. Conservation Dept., has been named by Pres. Eisenhower as one of three men to represent the United States on an International Commission of the United States and Canada to work on the problem of rehabilitating fishing on the Great Lakes. Other members named are John L. Farley, director of the Fish & Wildlife Service, and Claude Ver Duin, Grand Haven, Mich., executive secretary of the Great Lakes Harbor Assoc. The Commission will study and recommend measures aimed toward a maximum yield.

Canadian members of the Commission are Dr. W. J. K. Harkness, chief of the Ontario Division of Fish & Wildlife; Dr. A. O. Pritchard, Ottawa, of the Federal Fisheries Dept.; and Dr. A. C. Blackhurst, Port Dover, manager of the Ontario Council of Commercial Fisheries.

Big Demand for Precooked Fish

A survey of the Lenten seafood market in Milwaukee this year revealed that packaged frozen precooked fish are getting a big share of the business. The packaged fish trade has become so attractive in this area that several Milwaukee firms are getting salt water haddock from the seaboard in 7 or 12 pound frozen compressed blocks. These are sliced to consumer sizes, precooked and delivered packaged to stores. One firm was reported to be packaging 10,000 pounds a week.

On the fresh water fish market, lake trout and whitefish are less plentiful this year, due at least in part to the damage inflicted on the Lake Michigan fish population by sea lampreys. The Lake Superior trout catch, now the main one, was light since fishermen were handicapped by the ice and storms prevalent in that area.

Lake Michigan chub were plentiful, these fish seemingly being more or less immune to lamprey attacks. Also available were some Lake Michigan perch, caught off Milwaukee or around Green Bay. Smelt, dipped through the ice in the Marinette, Wis. area of Lake Michigan, found a ready market.

Would Establish Fish Hatcheries

A bill introduced in the Michigan House would provide for establishment of four new fish hatcheries, one in the Saginaw-Huron area. The measure would authorize the State Conservation Commission to pick sites for hatcheries to produce lake trout and whitefish, and would appropriate $75,000 to finance the project.

Walter Olson, commercial fisherman operating on Little Bay de Noc, Mich. ice, pulling in a smelt pound net.

Seeks Funds for Lamprey Extermination

Rep. Henry S. Reuss of Wisconsin reported last month that he had urged the administration to ask Congress for enough money to begin an all-out extermination campaign against sea lampreys in the upper Great Lakes. The State Department has proposed asking for $615,000 for the fiscal year beginning July 1, compared with $350,000 available during the current fiscal year.

Green Lake May Provide Eggs for Trout Comeback

There is a possibility that Green Lake, Wisconsin's deepest inland body of water, may some day provide the eggs for a comeback of lake trout in the waters of Lakes Michigan and Superior. This possibility was discussed at a recent meeting of the joint fishery and enforcement boards of the Wisconsin Conservation Dept.

The boards voted to recommend that the present bag limit of five lake trout, on inland waters, be reduced to two, in order to encourage a greater increase in the lake trout population. No commercial fishing is permitted on these lakes, except for rough fish.

Good Demand for Rough Fish

The Wisconsin Conservation Department's rough fish removal unit on Sheboygan Marsh near Elkhart Lake announced in February that carp would be sold to the public on Wednesdays at 5¢ a pound. The experiment in consumer sales was, however, called off after several weeks, because the State men were unable to trap enough carp to keep up with the demand.

Mild weather apparently gave the carp sufficient oxygen throughout the marsh, and they did not congregate near the fish trap as in other years.

Planting of Hatchery-Raised Fish

Dr. J. R. Dymond, chairman of the Conservation Council of Ontario, recently gave a summary on conditions which justify planting of hatchery-raised fish.

He stated that there are only four conditions under which the planting of hatchery-raised fish is justified. These are: (1) for the introduction of species into suitable waters where they do not occur naturally; (2) where the population in a body of water has been wiped out through pollution, Winterkill or other catastrophe; (3) for maintaining fishing in waters where there are few or no suitable spawning grounds, but where conditions for survival and growth are favorable; and (4) for stocking with legal-size, hatchery-raised game fish in heavily fished waters where it is considered desirable to provide fish in excess of the number which the waters will produce naturally.

Mink Rancher to Buy Herring and Smelt

Herbert A. Nieman & Co. of Thiensville, Wis. has sold its cold storage plant at Hermansville, Mich. to James Moore, mink rancher of Peshtigo, Wis. Moore will establish a mink ranch there and will use huge quantities of herring and smelt which will be purchased directly from the commercial fishermen in the area.

Depth Sounders Installed

Arthur Lasanen, marine equipment dealer at Traverse Bay, Lake Linden, Mich., reports that he has made 6 installations of Bendix depth sounding equipment on fish tugs recently. Bendix DR-7 depth recorders are now aboard the *Eagle*, owned by Arthur Tormala; the *Pioneer*, owned by Vivian Nordstrom and the *Kevinbren*, owned by Frank Miller. Bendix DI-1 depth indicators were installed aboard the *Peter W.*, owned by Jarvey Brothers and the *Sea Raider*, owned by Walter Hataja. The *Sherlyn-Dennis* owned by John Wiita has a DI-3 Bendix depth sounder.

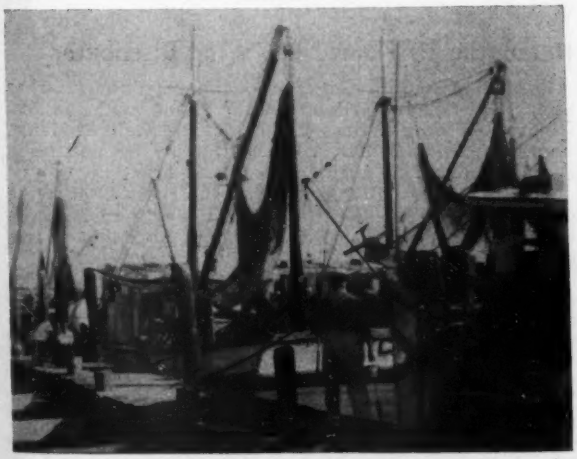
From left to right: Sebastian Cardinale, Patterson, La., vice-president of the St. Mary Fisherman's Cooperative Association, Inc.; W. D. Jackson, member of the Board of Directors; and his son, Vernon D. Jackson, manager of the Cooperative.

Better Quality Shrimp is Aim Of St. Mary Cooperative

The St. Mary Fisherman's Cooperative Association, Inc. of Patterson, La., which received its charter from the State last September, strives for uniformity and good quality in its shrimp. Boat owners, shrimpers, captains and some cooperative employees share in the earnings, with the organization functioning like any other business with a board of directors, officers and manager. Approximately $30,000 to $40,000 was invested in the purchase of the site, which fronts 200 feet along Bayou Teche and runs back 300 feet to Main Street. Galvanized work sheds contain grading and packing machinery worth $10,000, and 20 persons are employed at the plant.

Some of the Patterson boats in the Cooperative are as follows: *Navigator,* Roy Adams; *St. Jude* and the *Patricia,* Ford Thibodeaux and Henry Estave; *Little Cracker* and the *Butch,* Carlos Pinho; *Riverside III,* Jeffrey Theriot; *Capt. Mose,* Mose Guidros; *Mike,* Earl Landry; *Venture,* Charles Magin and John Davis; *M. A. Bowlin,* W. D. Jackson; *G. MO. Marconi,* V. D. Jackson; *North Sea,* Dewey Delaune; *Glen,* Ernest Felterman; *Sister,* Harry Wiggins; *Mc David,* Burney Wiggins.

Heading the St. Mary Cooperative is Ford Thibodeaux, president, while Sebastian Cardinale and Henry Estave are vice-presidents, and Earl Landry is secretary-treasurer. Manager of the Cooperative is Vernon D. Jackson, and his father, W. D. Jackson, is a board member together with the other officers named.



Some of the shrimp trawlers in the St. Mary Fisherman's Cooperative Association, Inc., Patterson, La.

Dr. Bigelow Honored on 25th Anniversary of Woods Hole Oceanographic Institution

Dr. Henry Bryant Bigelow, 70, Professor Emeritus of Harvard University and Dean of American Oceanographers, was honored recently on the occasion of the 25th anniversary of the Woods Hole Oceanographic Institution which he helped to found and served as its first Director. A leatherbound copy of the Bigelow Volume, a collection of 48 original scientific contributions, prepared by his students, disciples and friends, was presented to Dr. Bigelow by Columbus O'D. Iselin, Senior Oceanographer and a pupil of the noted scientist.

A rare distinction in the scientific world, the volume named in Dr. Bigelow's honor is a supplement to Deep Sea Research, a scientific journal, and will be distributed to all subscribers of that periodical. The papers in the work of 500 pages deal to a great extent with marine life and fisheries.

Dr. Bigelow, still active today, is the author of more than 75 scientific contributions and several textbooks, frequently co-authored by William C. Schroeder of the Woods Hole Oceanographic Institution. One of these books, "Fishes of the Gulf of Maine", was published in 1954.

Dr. Henry Bryant Bigelow. *(Bachrach Photo)*

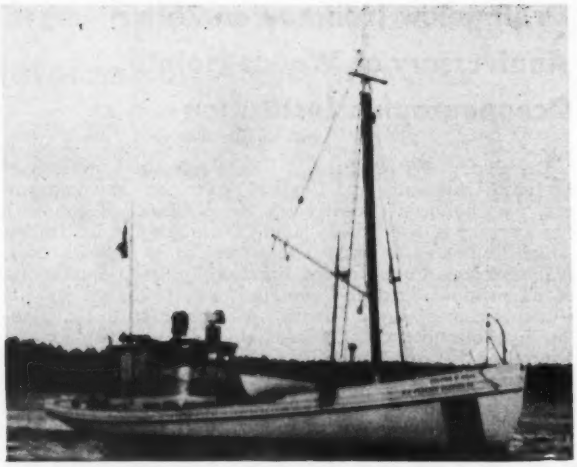
Not bound to a laboratory, Dr. Bigelow has spent a great deal of his life at sea, making scientific observations and learning at first hand the difficulties of fishing. It is noted, however, that his oceanographic observations frequently showed a gap during the partridge hunting season!

Born and brought up in Boston and Cohasset, Mass., Dr. Bigelow graduated from Harvard in 1901 and, soon after, took part in several oceanographic expeditions to the Equatorial regions. He became a full professor at Harvard in 1931, and taught biological oceanography and later invertebrate zoology. On reaching the ordinary age of retirement, the university asked him to continue in service and granted him an honorary degree in the same year. He also received honorary doctorates from the University of Oslo and from Yale University.

A man of many honors, Dr. Bigelow has received the Johannes Schmidt Medal, one of eight distributed by a Danish Foundation, the Alexander Agassiz Medal from the National Academy of Sciences and the Bowie Medal of the American Geophysical Union.

The establishment of the Woods Hole Oceanographic Institution in 1931 was the result of a report prepared by Dr. Bigelow in 1927 for the National Academy of Sciences. Soon after, the Rockefeller Foundation, the Carnegie Corporation and other donors made the Institution a reality and Dr. Bigelow served as its first Director. For ten years he encouraged boldness among his staff of young scientists drawn from the universities, and his greatest gift as teacher and taskmaster was the ability to broaden the vision of everyone fortunate enough to come under his sphere.

Serving later as President of the Corporation and now, as Chairman of the Board of Trustees of the Woods Hole Oceanographic Institution, Dr. Bigelow has seen the development of the Cape Cod Institution from a handful of scientists, with one ship, working chiefly during the Summer months, to a year-round organization with some 350 people and four sea-going vessels.



The "Sylvina Beal", 81' sardine carrier owned by R. J. Peacock Canning Co., Lubec, Me., and skippered by Capt. Frederick S. Boyce. Fish hold capacity is 1211 bushels, and the vessel has 330 hp. General Motors power plant, Hudson American radiotelephone, Bendix depth recorder, and radar.

Maine Plant Wants More Hake from Fishermen

The plant of Burnham and Morrill at Vinalhaven wants a million and a half or more pounds of hake this year, and will pay two and a half cents a pound. Packers and candlers in the processing plant will have their wages raised to the new minimum of $1.00 per hour.

The plant's operators have assured the fishermen that the price paid for the hake will not go below two and a half cents a pound, but that they must have big volume to maintain this price. The plant is planning to ship out iced the codfish caught along with the hake but not used for processing.

The hake season opens late in May, and officials of the Burnham and Morrill plant are urging lobstermen to try haking in their slack season to help assure the plant of the volume of hake needed to have a profitable season.

"Drift" is High Line Rockland Trawler

Catches of redfish and groundfish by six Rockland trawlers of the Birds Eye Division in January totaled 2,279,900 pounds. High line trawler for the month was the *Drift* with 415,500 pounds of redfish and 105,500 pounds of groundfish.

Canned Sardine Stocks Low

Distributors' stocks of Maine sardines amounted to 326,000 actual cases as of January 1, a decrease of 28,000 cases since November 1, when they were last measured.

Canners' stocks amounted to 475,000 standard cases on January 1, or 62 percent less than on the same date in 1955, which reflects the lighter pack in 1955. From November 1, 1955 to January 1, 1956, canners' stocks dropped 150,000 standard cases.

Harriman Reports on Gas Disease in Lobsters

Donald M. Harriman, marine biologist with the Dept. of Sea & Shore Fisheries, recently published a report entitled "The Gas Disease in Lobsters", in which he tells dealers how to reduce mortalities from this disease and thus save $10,000 to $15,000 a year.

Gas disease in lobsters is an ailment caused by a supersaturation of dissolved nitrogen in the water surrounding tank-held lobsters. This condition is likely to result in lobster holding tanks when pump glands are faulty, or when spray nozzles are used which increase the back pressure on the pump. Air under pressure pumped into a tank of sea water can raise the amount of nitrogen present enough to cause distress and eventual death of the lobsters.

A list of instances when gas disease has been diagnosed as the cause of wholesale deaths among tank-kept lobsters is given in the report. Over a period of four years Harriman observed plants where such mortalities ran high —sometimes up to 30 or even 50 percent per day.

Concluding his report, Harriman remarked that it would be of value to the lobster industry if some method of measuring gas tension could be devised. It also would be valuable to know the point at which supersaturation becomes lethal. If this could be done, then lobster tanks could be checked regularly and the danger of gas disease developing without the knowledge of the plant owner would be eliminated.

Reappointed to Sardine Council

Ralph B. Stevens of Yarmouth and Milroy Warren of Lubec were reappointed recently to the Maine Sardine Council for five-year terms. The Council supervises use of the promotion and research fund obtained from the 25-cents-a-case tax on Maine's sardine production.

Look Buys Wharf from Birds Eye

Harold W. Look of the H. W. Look wholesale lobster firm of Rockland has purchased the former Maine Central Wharf from the Birds Eye Division of General Foods Corp. Mr. Look's plant has for several years been located in buildings at the head of the wharf, which once housed the offices of the railroad's steamboat line and its maintenance and supply sheds.

Sardine Quality Research at University

An experimental activity is taking place in the laboratories of the University of Maine as part of a big research program for the sardine industry to help the canners improve their products and processes. A staff, headed by Ralph Berglund, is utilizing standard factory equipment such as retorts and sealing machines plus frozen fish as they attempt to unravel a variety of problems assigned to them.

These problems include such matters as salt and moisture determination, best methods of preparing mustard and tomato sauces, efficient cooking times and temperatures, vacuum packing, types of pack, temperatures in connection with cans of different sizes and thicknesses, flavor and texture, advantages of various types of oil and sauces, as well as other factors involved in the production of sardines.

Harbor Supply Named Red Wing Distributor

Red Wing Marine Corp. has announced that Harbor Supply Oil Co., 42 Portland Pier, Portland, will now distribute Red Wing engines throughout the State of Maine. Capt. H. William Miller of Harbor Supply Oil will be in charge of Red Wing engine sales for his firm.

Harbor Supply Oil will display a full line of Red Wing engines, and can make immediate delivery. Service on the older Red Wing engines operating in Maine waters also will be available.

The Red Wing line contains 13 models, and is divided into three separate series—the "Meteor", "Arrowhead", and "Diesel", which are all manufactured from different blocks.

John Tonneson

John Tonneson of the Willard-Daggett Fish Co., Portland, died recently in Florida. Mr. Tonneson had spent most of his life in the fish business, and was well known throughout the industry.

Florida's New Shrimp Research Boat Completes First Trip

Small numbers of rock-shrimp were taken over a wide offshore area between Jacksonville, Fla. and Savannah, Ga. during the first cruise of the Fish and Wildlife Service's *George M. Bowers*. The cruise was the first of a series of exploratory operations to determine species of shrimp present and the commercial fishing potential of the South Atlantic area.

Using 40' flat shrimp trawls, 25 one-hour drags were made in the area between the 20 and 50 fathom depth contours. The research vessel caught 21-25 count (heads-on) rock-shrimp, a species with a hard, lobster-like shell and not presently in commercial demand, in 17 drags. The catch ranged from individual shrimp to 2½ pounds (heads-on) per drag. Analysis of the catch of rock-shrimp indicated that better hauls were obtained during night-time fishing. None of the presently commercially valuable species (white, pink or brown shrimp) was taken.

Bottom conditions as observed by echo tracings and bottom samples indicated extensive trawlable sandy bottom between 20-30 fathoms. Between 30-50 fathoms the area was found to be generally rocky, rough, and to drop off steeply. Several commercial species of flat fish were taken in 22 hauls, including Northern fluke, ocellated fluke, and small-tailed flounder. The average weight of these fishes was approximately one pound.

"Pelican" to Explore for Deep-Water Shrimp

The *Pelican* was scheduled to depart from Jacksonville on February 29 to carry out deep-water shrimp explorations in the Cape Canaveral to St. Augustine area. Dragging was to be done in depths of 100 to 300 fathoms. This cruise initiates the deep-water phase of the South Atlantic Fisheries Exploration Program.

The *Pelican*, a 74' steel hull shrimper under charter from Gulf-Caribbean Seafoods, Inc., has been equipped with a Hathaway winch holding 800 fathoms of wire rope. Donald Bates, a commercial fisherman and graduate of the University of Washington School of Fisheries, will be in charge of the *Pelican's* research activities.

Developing Soft-Shell Crab Industry

Methods of producing soft-shell crabs in Florida on a commercial scale have been developed by the University of Miami Marine Laboratory in cooperation with a Florida West Coast crab dealer. This included tests of a gear called the crab scrape, used successfully in Chesapeake Bay in collecting "pre-peelers". The success of this gear is limited during some periods of the year since rolling "grass" is picked up in such abundance that it prevents the capture of crabs.

A crab fyke net, another type of gear used to collect "pre-peelers" in Chesapeake Bay has been tested in the Peace River. This gear consists of a wire fence running from the high-water mark on shore to a funnel opening in a trap 4 x 4 feet, made of wire on a wooden frame.

Floats which have been developed for the shedding crabs consist of 3 wooden bins arranged in tiers, each 4 x 10 feet, with a water depth of 9 inches. The water depth is regulated by an opening which drains the water from one bin to the next. The water is supplied by a self-priming pump powered by a 1 hp. motor.

New Fishery Statistical Office at Key West

A statistical office for the collection of fishery data has been opened at Key West, with James H. Ryan in charge. The office will collect detailed data on employment in the fisheries, number of craft and quantity of gear operated, the catch of fishery products, and related information on the fisheries in the vicinity of Key West.

The 36' x 10' x 3' shrimp trawler "La Mer", owned by T. W. Graham, Jr. of McClellanville, S. C. Her power plant is a 110 hp. Chrysler Crown engine, and the vessel has Surrette batteries, 22 x 16 Columbian propeller, Danforth anchor, Linen Thread Co. Gold Medal nets and Columbian rope. Her skipper is Capt. B. S. McClellan, and the shrimper is finished with Tarr & Wonson bottom paint.

South Carolina Seed Oyster Export Industry Proposed

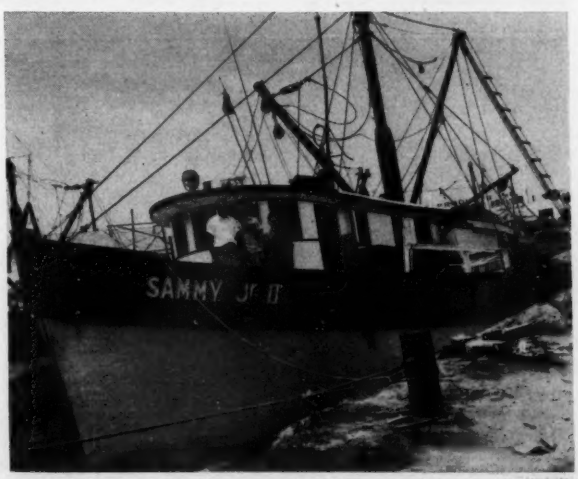
In his annual report, Dr. Robert Lunz, director of the Bears Bluff Laboratories in South Carolina, proposed that the State consider the possibility of utilizing oyster grounds now closed to exploitation by pollution, for growing seed for export to the Chesapeake area. He pointed out that growing of seed oysters for such interstate shipment could be safely conducted on these polluted grounds, since the seed oysters would cleanse themselves in their new home before reaching market size.

Bill Would Change Oyster Lease Practices

The Senate Fish, Game and Forestry Committee last month introduced a bill in the General Assembly to abolish the present practice of allowing individuals to take two bushels each from leased oyster beds. Instead, a five-acre area would be set aside in each coastal county for the taking of oysters by individuals. The State leases oyster beds in tideland areas to private companies.

Willis Gregory, Sr.

Willis Gregory, Sr., owner of the Florence Fish and Oyster Co., wholesale fish dealers of Florence, S. C., passed away recently.

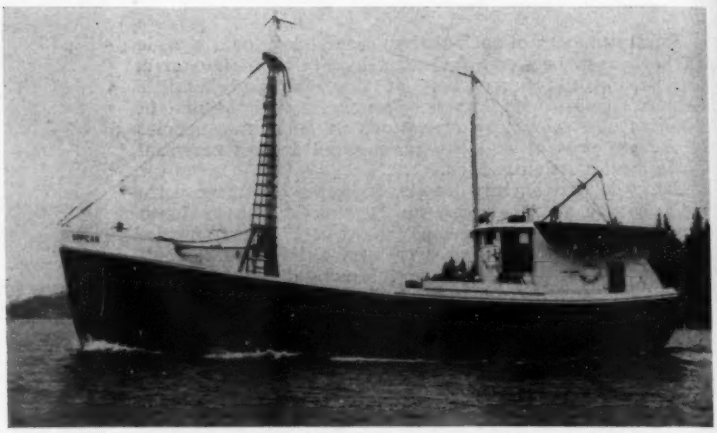


The 59' shrimp trawler "Sammy Jr. II" of Tampa, Fla., owned by Capt. Sam Vona. She is powered with a General Motors 6-110 Diesel.

New Scalloper "Sippican" Has Transom Stern

THE 76-foot scallop dragger *Sippican* stocked $6500 from 10,600 pounds of scallops on her maiden 10-day voyage, landed at New Bedford, Mass. on March 5. Skippered by Capt. Edison Love of Wareham, Mass., she is owned by Love Fisheries Inc., Marion, Mass. of which Edlon Love is president. The firm also owns the *Mary D'Eon*, and Capt. Love previously commanded the *Nellie Pet*.

According to her skipper, the *Sippican* proved to be a very good sea boat on her first fishing trip. He reports she is steady and acts well, with very little roll. Despite stormy weather with winds up to 60 mph., it was not necessary to use her riding sail, and she never took a drop of water. On her run from the shipyard to New Bedford, Capt. Love said the vessel made 10.6 knots, with a 15-mile head wind.



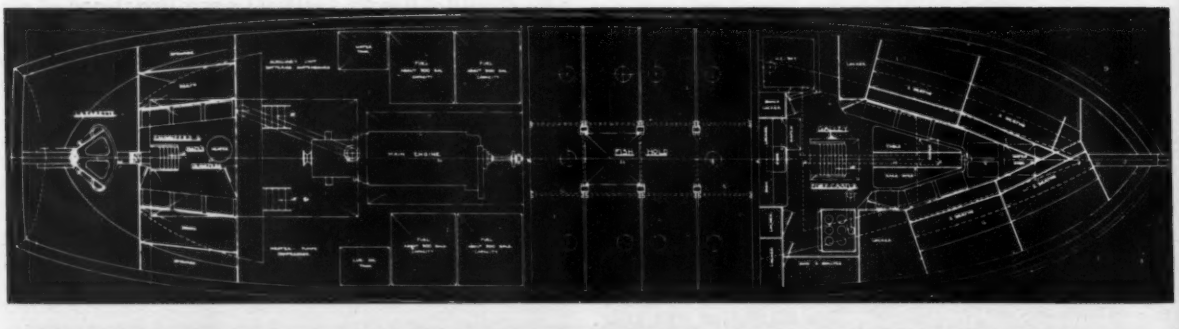
The new 76' scallop dragger "Sippican" built by Harvey F. Gamage, So. Bristol, Me. for Love Fisheries, Inc., Marion, Mass. Her homeport is New Bedford.

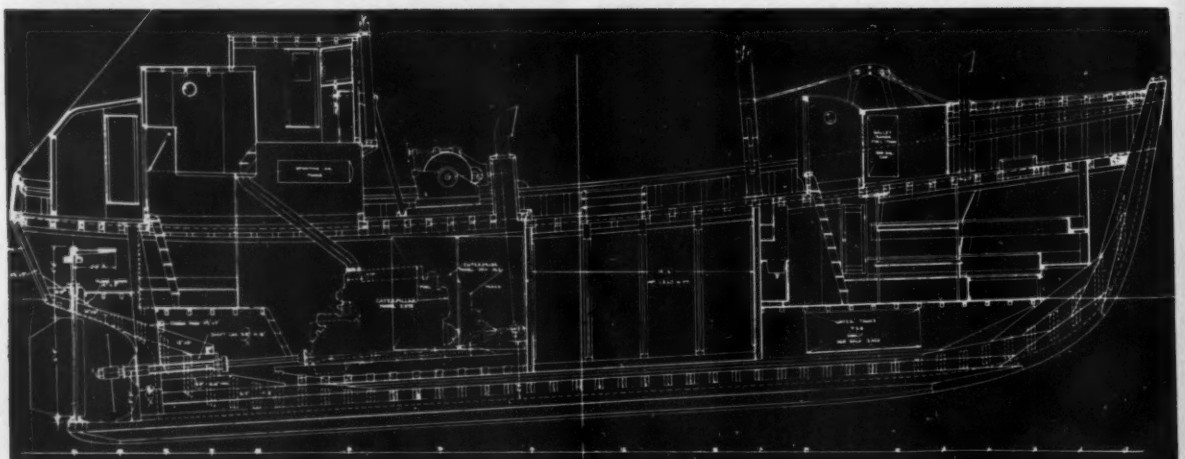
The new vessel was built by Harvey F. Gamage, Shipbuilder, South Bristol, Maine from designs of Dwight S. Simpson and Associates, Boston, and was launched Feb. 7. The *Sippican* is somewhat of a departure in hull form for fishermen. She has a transom stern, and her middlebody is considerably fuller than usual, with very much less deadrise and a higher freeboard than most boats of her size. These features contribute toward making her an easier and faster vessel, especially in rough water.

Many years of observation by the architect on the behavior of transom stern yachts, the old World War I 110-foot sub chasers as converted to fishing boats, and larger vessels, indicates that there is little to choose from among transom, cruiser and tugboat sterns as far as seagoing ability is concerned. This, of course, excludes consideration of fast boats with transoms which are wide and deeply immersed.

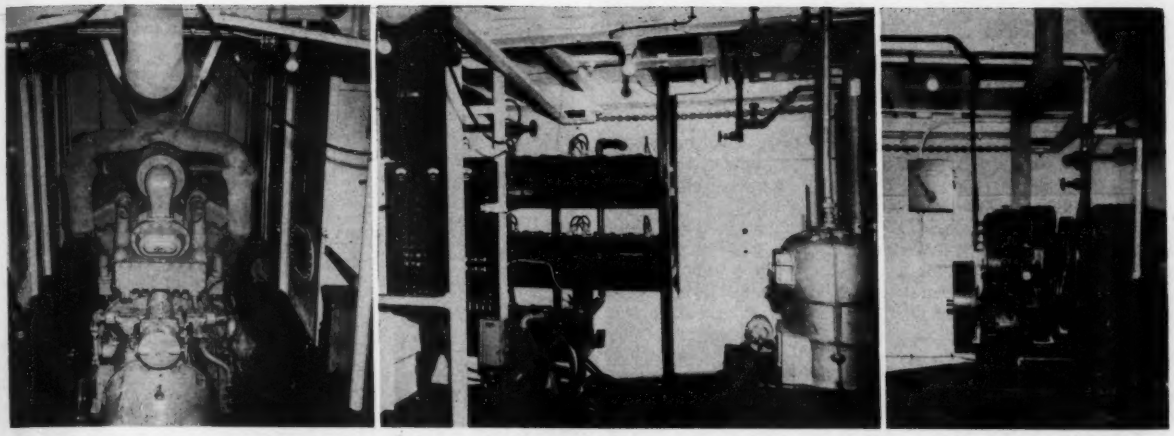
In the opinion of the architect, for the same length of vessel, the transom stern gives better hull lines and somewhat more speed. It is also lighter and much cheaper to build than either other type. Possibly it is more subject to minor damage around docks, but fishing vessels are not designed with the idea of being at their best around docks.

The *Sippican* has an unusually large amount of space





Below deck arrangement plan and inboard profile of 76' scallop dragger "Sippican", designed by Dwight S. Simpson & Associates.



"Sippican" engine room showing left, D375 Caterpillar Diesel; center, "Safety" voltage regulator over switchboard, Surrette batteries and Shipmate hot water heating boiler; right, Deseco-Lister Diesel auxiliary unit.

for crew accommodations, with arrangements comparable to what might be found on an 85-foot vessel. There are 8 built-in bunks in the fo'c's'le, two in the after cabin and one in the stateroom, aft of the pilot house.

Galley facilities in the fo'c's'le include a #450 Shipmate oil burning range, stainless steel sink with hand pump for fresh water, built-in ice refrigerator, hardwood mess table and Formica-covered dresser tops. All trim and berth fronts are of mahogany. Fresh water tanks under the fo'c's'le floor carry 600 gallons. A 200-gallon tank forward of the dog house under the whaleback extension, carries fuel oil for the galley range.

The vessel has a beam of 18'6" and draft of 9'6". She has 9" oak keel; 3" double sawn, molded oak frames on 18" centers; 2" oak planking; 2½" pine decking, and galvanized fastenings. She is finished with Pettit paints.

The fish hold is 14'6" long and contains about 1860 cubic feet. There are four pens on either side, with deck plates over each. Fish capacity is calculated as 85,000 lbs.

Good accessibility is provided to all equipment in the engine room. There are four welded-steel fuel tanks, with total capacity of 3600 gallons. A Shipmate #30 oil-fired hot water boiler supplies heat to radiators in the pilot house, stateroom, cabin and engine room, and there is a Mott toilet. Socony fuel and lubricants are used aboard the dragger.

Fishing gear consists of Hathaway Model 653 winch with 18" drums, a jackshaft with fast winch heads for scallop dragging, and two 5" gallows frames. The vessel carries two 13 ft. bottom dories for life boats, two 30" life rings, and a 150 lb. Danforth anchor.

Pilot house equipment comprises 6" White Constellation compass, RCA 50-watt radiotelephone, RCA direction finder, Bendix depth recorder, Clark Cooper fog horn, Hathaway reduction gear steering and two Loran sets.

Engine Room Equipment

The *Sippican* is powered by an 8-cylinder, 5¾ x 8, D375 Caterpillar Diesel, rated 302 hp. continuous at 1225 rpm., and supplied by Houghton-Arnold Machinery Co., Portland, Me. The engine is fitted with 2.93:1 Snow-Nabstedt reduction gear and swings a 54 x 41 Hyde propeller on a 4½" Tobin Bronze shaft with Hathaway flax packed stuffing box and Goodrich Cutless rubber stern bearing. The 4" bronze rudder port was made by J. F. Hodgkins Co.

The Deseco-Lister auxiliary power unit was furnished by Diesel Engine Sales & Engineering Corp., Boston. It consists of a 9 hp. FR-1 Lister Diesel connected to a 5 kw., 115/140 volt Imperial generator, and operating Quincy air compressor and Marine Products bilge pump.

The vessel has a set of Type HHG-21 Surrette 112-volt batteries. There is a 5 kw. generator with "Safety" S150E voltage regulator, driven off the main engine. Other pumps include bilge and wash down units belt driven from the main engine and an electric wash down pump.

Capt. Edison Love, skipper of the "Sippican", plotting his course.

Connecticut Fishermen's Association Protests Dredging for Road Fill

James P. Mayhew, president of the Statewide Natural Growth Oyster and Fishermen's Association, reports that his organization has written three letters to State officials protesting the proposed dredging of 3,500,000 cubic yards of fill from Long Island Sound waters off Sherwood Island, Westport, to be used for the Connecticut turnpike.

Mr. Mayhew claims that the dredging will ruin the clam and oyster beds in the area, as well as spoil the fishing area off Sherwood Island and the blue crab areas, where the fill is to be piped for drainage (a point behind Alvord Beach at Sherwood Island). He pointed out further that a public hearing should have been called on the dredging proposal.

Fishermen Hampered by Weather

Stonington fishermen had a poor fishing month in February. Hampered by inclement weather, bad storms, high winds and snow, the fleet landed only 57,600 pounds of fish during the month, well under the normal amount.

Also cutting into the Stonington landings was the fact that many of the boats which were "junking" during the month made their landings at Point Judith, R. I.

Plan Fleet Blessing

Plans for a Blessing of the Fleet ceremony honoring the memories of Stonington fishermen lost at sea are being made by the Southern New England Fishermen's Assoc. It would be the first such affair held in Connecticut.

California Sardine Catch Shows Gain

Landings by California's sardine fleet totalled about 75,000 short tons during the season which closed February 1. The 1955-56 catch increased about 12 percent over the 67,000 tons landed in the previous season.

In both fishing seasons the catch represented sardines migrating north from Mexican waters, with practically none caught north of Morro Bay. Virtually none were landed at Monterey, and the fish processed there were trucked north from southern California. The catch was good in the Santa Barbara and Port Hueneme areas early in the season, and later spread south as far as Oceanside.

In the San Pedro area, despite a three-day extension of the season, fishermen this year were unable to equal their catch for the 1954-55 season. At the season's close on February 1, San Pedro area sardine landings totalled 52,033 tons, as compared to the total of 54,310 the season before.

According to John Costanza, president of the San Francisco Sardine Assoc., the industry is looking forward to better times. Research groups and the California State Fish & Game Commission have reported the sardine population is increasing, and that spawning in California waters has risen from a low of five percent to more than 50 percent.

To Support Import Quota Bill

Possible help for the tuna industry was seen in a bipartisan campaign launched in Washington, D. C. last month by 11 GOP and Democratic legislators. They promised to speak on HR 8954, which would ask for placing of import quotas that would stabilize import competition and establish the basis for expanded foreign trade without creating hardship for domestic industries.

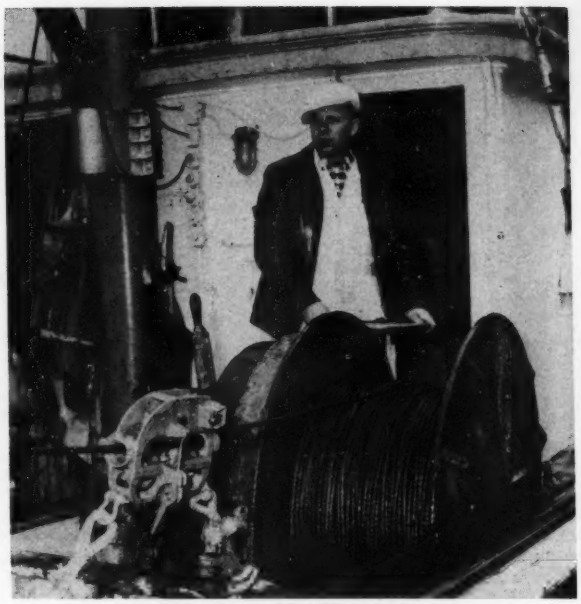
Primary objective of the bill, introduced by Rep. Bob Wilson of California and Henderson Lannam of Georgia, would be to aid the West Coast tuna industry in its fight against Japanese competition.

In San Francisco last month a U. S. Tariff Commission opinion that it should not restrict Japanese tuna imports was challenged by Senator Magnuson of Washington. He wired fishermen in San Francisco that the Commission's request for more time to study the situation is unfair and unnecessary, and that there should be no further delay in giving aid to tuna fishermen in this country.

Will not Engage in Northern Salmon Season

Monterey Bay fishermen gave up plans to go north for the Oregon-Washington salmon season when it was announced by the Fish Commissions of those States that the season this year would not open until April 15. In other years the March 15 opening in the north enabled the men to fish for six weeks before the California season began May 1. The October 31 closure date will remain the same in the two northern States.

UNIVERSITY OF WASHINGTON SCHOOL OF FISHERIES has purchased the 67' seine boat "Commando", which will become a floating laboratory for use in their expanded ocean research program. The vessel formerly was owned by Einar Teines, Seattle fisherman, and his partners.



Capt. Erling Jacobsen, owner of the Seattle dragger "Paragon", which was the top producing food fish boat in the Pacific Northwest during 1954. She is equipped with #685 Olympic trawl cable meters.

Monterey Fish Processors' Assoc. Revived

Revival of the Monterey Fish Processors' Assoc. was announced recently. The organization of fish plant operators closed its Cannery Row office four years ago when sardine catches dwindled to almost nothing.

Officers of the group include Thomas R. Noice, California Packing Corp., president; J. R. Perry, Carmel Canning Co., vice-president; George Leutzinger, Peninsula Packing Co., secretary-treasurer; and George Clemens, consultant.

Several Boats Change Owners

A number of boats have changed hands during the past month at Moss Landing. Albert Phillips of Watsonville has sold his salmon troller *Sea Star* to Leonard Shirrell of Stockton. Fred Emigh of Saratoga has purchased the *Sassy Hannah*. Harry Wilson and Herbert Robertson have purchased the 26 ft. double-ended *Dragnet*.

Joe Spadara of Monterey is the new owner of the *Jolaine II* which he has renamed *Gasper Boy II*. Capt. Spadara is skipper of the 70 ft. purse seiner *New Marettimo* during the sardine season and also owner of the *Gasper Boy I*. His new boat is a 44-footer, Diesel powered with a General Motors 3-71 and equipped with a Bendix 100-fathom depth indicator. She is suitable for salmon, albacore, lampara bait fishing and squid, enabling the new owner to fish the year-round.

George Beck of Monterey has purchased the 52 ft. double-end troller *Azalea*, formerly owned by the late Charles Hagglund. The boat is equipped with an 85 hp. Caterpillar Diesel, Wood Freeman automatic pilot and Bludworth depth sounder.

Bay Shrimp Disappear

The tiny bay shrimp that have been fished off San Francisco since 1896 have been driven away by the heavy

rains and floods this Winter. Some 300 fishermen, who drag the bay floor for the tiny red crustaceans, have been sending out only one boat a week to see if the shrimp have returned. Since mid-December there have been no commercial-sized catches.

D. H. Fry, Jr., marine biologist at Stanford University, said the shrimp is a salt water creature that can't survive when the saline content drops below a certain point. The heavy runoffs of the Sacramento River have diluted the salt water to below that point.

Obtain Data on Range of Jack Mackerel

Oceanographic research vessels from the West Coast of the United States and Canada, the Hawaiian Islands and Japan participated last Summer in the "Norpac" expedition, a coordinated program conducted over the northern Pacific Ocean. As a result of this expedition, knowledge of the range of the jack mackerel has been extended greatly, Fish & Wildlife Service biologists report. The jack mackerel is of considerable commercial importance in California.

Mackerel eggs and larvae collected on the expedition indicate the species spawns as far seaward as 1200 miles off the Oregon coast. Prior to this expedition, eggs and larvae had been routinely collected 200 to 300 miles off the California coast and on one occasion about 450 miles west southwest of Point Conception.

During the expedition the Fish & Wildlife Service's exploratory fishing vessel *John N. Cobb* obtained a similar range extension for adult jack mackerel. Previously known as far north as the Queen Charlotte Islands in British Columbia, adult jack mackerel were taken on this expedition in the Gulf of Alaska, which is some 200 miles farther north. They extended about 500 miles to the west, almost to Kodiak Island. The westernmost adults in the Gulf were about 700 miles directly north of the eggs and larvae collected 1200 miles west of Oregon.

Crab Season Slow

Crab fishing, which opened in San Francisco on November 15, is now in a slump so that only 70 of the 120 boats based at Fisherman's Wharf are going out at all. Other boats are waiting for the opening of salmon fishing May 1.

For several seasons the crab grounds have been depleted after a few months, and last year the Legislature shortened the season and changed the trap dimensions to permit undersize crabs to escape.

Tagged Sturgeon Recovered

Another sturgeon tagged in September, 1954 by California's Dept. of Fish & Game in San Pablo Bay has been recovered off the mouth of the Columbia River near Astoria, Oregon. This recovery brings further verification of the fact that there is an interchange of the big fish between the Sacramento and Columbia River systems.

The second migrant taken was a 41-inch green sturgeon, caught in December, 1955 by an Astoria commercial fishing boat, and returned by the Oregon Fish Commission.

Steed, New Southwest Manager for Cummins

The appointment of W. M. Steed as regional manager of the Southwest Region, with offices in Los Angeles, has been announced by Cummins Engine Co., Inc. Mr. Steed is a graduate of Purdue University and has been associated with Cummins since 1951, when he joined the Diesel manufacturer as a sales engineer.

Prior to his recent appointment, Mr. Steed was a regional representative in the Central Region, with offices in Chicago. In Los Angeles, his headquarters will be at 1101 Equitable Life Building, 411 West Fifth St. The Cummins Southwestern Region consists of the States of California, Arizona, and Nevada.

43' Columbia River bar boat "Kay Bee", which has been purchased by Leo E. Jubelt of Morro Bay, Calif. from Frank Lloyd of Carmel. The vessel will be used for salmon and albacore fishing on the California coast between Fort Bragg and Morro Bay. She is equipped with 80 hp. Buda Diesel, 85-watt Kaar radio, Bendix 100-fathom depth indicator and 4 spool Akervick gurdies.

Washington Trollers Form New Organization

Phil Cope, Anacortes, has been elected executive secretary of a new fishermen's organization called the Washington Trollers Industry, which will promote the interests of troll fishermen in Washington. The word "salmon" was omitted from the name, since the organization wishes to represent all fishermen engaged in trolling.

Members of the board of trustees are Jim Cope and Al Green, Seattle; Frank Gardin and Milton Johnson, Ilwaco; Fred Cook and Frank Shye, Grays Harbor; Ted Wagner and Don Pitt, Port Angeles. Cope said 500 fishermen had joined and contributed funds to promote a public relations program.

By-laws have been adopted, and the following districts created: Columbia River, Grays Harbor, Peninsula, Tacoma-Olympia, Bellingham-Everett, and Seattle.

University Purchases Vessel for Research Work

The University of Washington School of Fisheries has purchased a 67-ft. seine boat, the *Commando*, for use in research work. The boat was purchased from Einar Teines, Seattle fisherman, and his partners. She will replace the *Oncorhynchus*, a 50-footer that had limited cruising range and inadequate living facilities.

The *Commando* has an 18 ft. beam and draws 8½ ft. She is powered by a 165 hp. Diesel engine and is equipped with sonar, radiotelephone, automatic steering and depth finder.

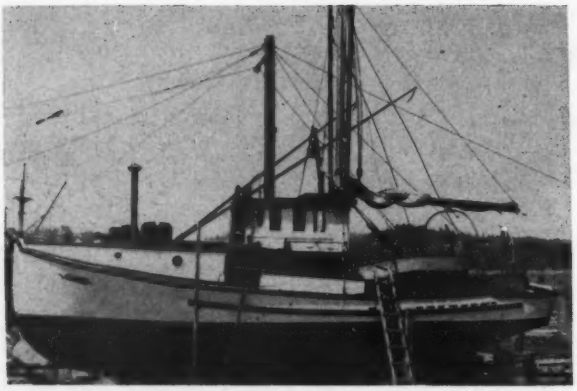
Two University of Washington fisheries technology students, James L. Burnett and Richard van Duke, have received $250 scholarships.

May Market Soft Clams in East

The Fish & Wildlife Service has agreed to study the possibility of marketing soft-shell clams from the Washington Coast along the Eastern seaboard, where the soft-shell variety is dwindling. More than 50,000 acres of non-producing tidelands in the Puget Sound, Willapa and Grays Harbor areas of Washington could be utilized for clams.

True Cod Landings Lead

Nearly 8,000,000 pounds of true cod were landed in the past year by members of the Fishermen's Marketing



Capt. Earl D. Graham's 38' "Juanita" of Coos Bay, Ore., which is used for crabbing, salmon and tuna fishing. She is powered with a 45 hp. Atlas Diesel.

Assoc. of Washington, to lead all other species caught by bottom fishermen.

Total landings of all species were 22,436,700 pounds, and true cod landings totalled 7,910,900 pounds. Other species included rock cod, ling cod, petrale sole, English sole, perch, Dover sole, flounders, rock sole, sable, rosefish, and rex sole.

English Sole Tagged and Released

The University of Washington and the Washington Dept. of Fisheries recently tagged and released close to 1000 English sole in the Everett Bay region of Puget Sound. This area is one of the most productive for sole taken from the inside waters, and has been a consistent producer during Winter months.

Conventional disc and spaghetti tags were used in about equal numbers. Results of the work should give clues to the size of the Everett Bay population, the amount of movement from the bay to other Puget Sound regions, and intensity of the fishery. It also is hoped to obtain a comparison of the utility of the two tag types.

Stream Conservation Council Formed

The Association of Pacific Fisheries has opened in Seattle a new office known as the Stream Conservation Coordinating Council. Heading the office is George C. Starlund, executive secretary. The Council will represent sports and commercial, salt and fresh water fishermen.

G. P. Halferty, president of the G. P. Halferty Co., is chairman of the new Council's board of directors. John Mitchell, president of the Puget Sound Canners Assoc., is vice-chairman, and Charles D. Alhadeff, president of Whiz Fish Products Co., is secretary.

Directors are Sydney M. Rosenberg, president of New England Fish Co.; James H. Cellars of Astoria, president of the Columbia River Salmon and Tuna Packers Assoc.; E. A. Ruthford, president of Northwest Fisheries Assoc.; and Gordon Bruce of Portland, secretary of the Oregon Sea Foods Assoc.

Bottom Fish Exploration by "John N. Cobb"

Bottom fish exploration in the Strait of Juan de Fuca was to be carried out by the Fish & Wildlife Service's exploratory fishing vessel *John N. Cobb*, from February 15 to March 9. The trawl survey was to be confined to the waters off the Washington coast, south of the International boundary line, primarily between Cape Flattery and Port Angeles. The object of the cruise is to determine trawlability of the bottom, and species and quantities of bottom fish available to commercial fishermen at this season.

Past experience of the trawl fleet has shown that much of the bottom in the Strait is rocky or otherwise too rough for bottom fishing without extensive damage or loss of gear. Using echo-sounding techniques and commercial style otter trawls and a beam trawl, the *Cobb* was to chart all the bottom areas which are suitable for trawling.

Pelican Company Buys Two Packing Firms

The Icy Straits Salmon Co. and the Hoonah Packing Co. of Southeastern Alaska have been sold to the Pelican Packing Co. of Seattle by Mrs. Jeanice Welch Walton of Bellingham. The Yakutat Alaska cannery operations have been retained by the Welsh interests.

New Halibut and Sockeye Regulations

North Pacific halibut fishing will open May 12, the International Pacific Halibut Commission announced. Fishing areas will remain the same as in 1955, and the catch limit will be 26½ million pounds in Area 2 and 28 million pounds in Area 3A for the first part of the season. The season will reopen August 10 for at least seven days in Areas 2 and 1B and for at least nine days in Areas 3A and 3B. A third section of the season is planned for Area 3B, which includes the grounds west of Shumagin Islands and in the Bering Sea.

Area 1 extends north from Cape Blanco to Willapa Bay, Area 2 from Willapa to Cape Spencer, Alaska, and Area 3 from Cape Spencer north.

Sockeye fishing on the high seas and in treaty waters along the west coast of Vancouver Island will be prohibited until August 6 under regulations announced by the International Pacific Sockeye Commission.

The Commission also recommended that the Fraser River be closed to fishing 78 hours a week until August 8, and 120 hours a week from then until September 19 when restrictions would be removed.

Otter Trawl Landings at Seattle

Landings in the Seattle otter trawl fishery during February totalled 1,750,000 lbs. from 59 trips. The biggest day in the month was the 6th, when 7 boats landed 311,000 lbs. Top variety for February was rockfish, with 491,000 lbs., followed by English sole, with 429,000, and true cod, with 326,000.

Oregon Gillnet Fishing Shows Improvement

Gillnet fishing on the Columbia started slow when the season opened on January 28, but by the last two weeks in February things had begun to look brighter. Early in the season steelhead provided the primary catch, and fishermen on the average were getting only four or five per boat for a night's fishing. But starting about February 20, increased catches of the higher-priced chinook salmon began to roll in.

The lower part of the River was producing the majority of the good catches, and midway between the mouth and Bonneville Dam many gillnetters were turning to smelt fishing for a while.

Salmon Trolling Season Cut by Month

The Oregon Fish Commission and the Washington Dept. of Fisheries have voted to cut one month off the season for salmon trollers. Under the new regulations the troll season will open on April 15 and end on October 31. This cuts a month off the opening part of the season.

Oppose Fisheries Transfer to Commerce Dept.

Columbia River fish packers have gone on record as opposing a recent bill introduced in Congress to establish an office of assistant secretary for commercial fisheries in the Commerce department.

T. F. Sandoz, head of Columbia River Packers Assoc., disclosed that there had been complaints about conduct of Alaska fishery affairs by the Fish & Wildlife Service. However, he feels that satisfactory work is being done

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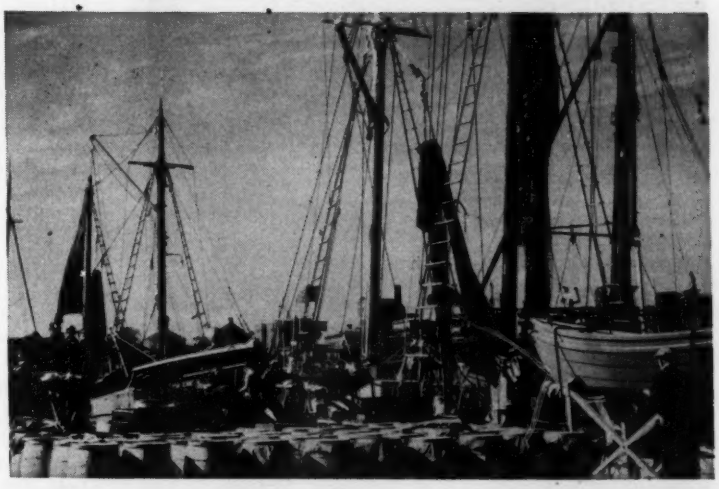

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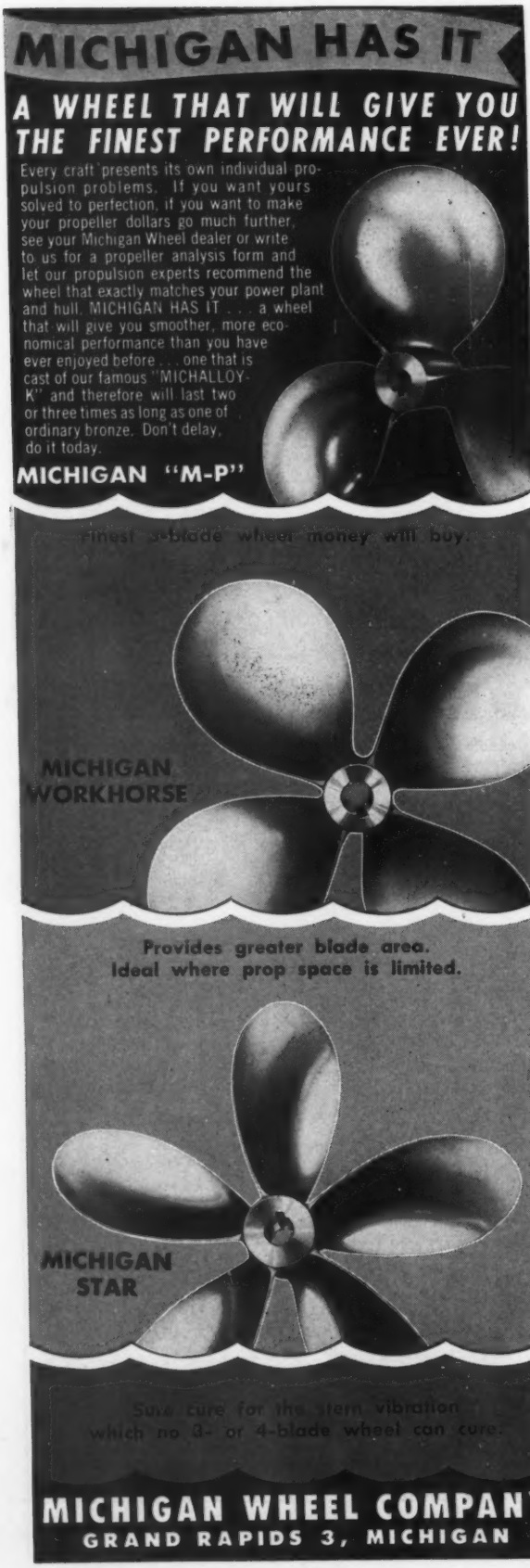
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now under direction of two former Oregon Fish Commission biologists, Arnie Suomela and Don McKernan, who have charge of Alaskan fishery research affairs.

New Hatchery to be Built

A new hatchery to be known as the Cascade hatchery is to be located on lower Eagle Creek, which enters the Columbia River just above Bonneville dam. Both salmon and steelhead will be reared at the new station, which will have 30 concrete ponds 80 ft. long and 16 ft. wide. It is estimated the station will have a capacity of 6,250,000 chinook salmon and 1,200,000 steelhead reared to yearling size.

Studying how much Salt Crabs Need

Biologists of the Oregon Fish Commission's shellfish laboratory at Newport have been making tests to determine just how much salt a crab must have in the water to live. Two commercial fishermen's live-boxes of crabs were observed for condition over a period of about 10 days, during which time heavy rains lowered salinity in the bay to that of fresh water, even at high tide.

The crabs in the live-boxes became weaker and weaker as the salinity got down to an extreme low of 2.6 parts of salt per 1,000 grams of water. Most of the crabs died in about a week's time.

Flood Damage to Fish Spawn

Salmon and steelhead runs in Oregon's streams may be sharply reduced for the next several years because of extensive flood damage to fish spawn. Probably the most serious loss of fish life occurred at gravel beds where silver salmon spawning recently had taken place. The scouring action of gravel and rock and resulting siltation destroyed eggs, and in some locations newly-hatched fry. Young fish lost the protection of the gravel and were exposed to predation by birds, craw-fish and other fish.

Salmon Marked by Fin Clipping

Some 100,000 fall chinook salmon recently have had their fins clipped in a marking operation at the Oakridge hatchery of the Oregon Fish Commission, and soon will be released into the Willamette River. This is part of a project to re-establish a run of fall chinook salmon above the Willamette falls.

The fin markings also may indicate the success or failure of a new hatchery procedure. Usually fall chinooks are held 90 days and then marked and liberated, but now the Fish Commission is trying the procedure of holding them 14 months before marking and release.

Another 100,000 fall chinook salmon recently were fin clipped at the Bonneville hatchery for release into the Willamette River near Harrisburg.

Spring chinook salmon—600,000 fish averaging 20 to a pound—have been released recently from the Marion Forks hatchery, into the North Santiam River below the power plant and irrigation ditch intake at Stayton. Also released from the Cedar Creek hatchery were 363,000 silver salmon into the Sandy River. These are large fish averaging 10 to a pound.

Astoria Fishermen Want Import Quotas

Astoria fishermen are currently joining a nation-wide drive to establish firm quotas on imports of all species of fish into the United States, but packers, particularly those who process tuna, and the Astoria Chamber of Commerce, are against such quotas.

Handbook on Fisheries Laws

A handbook called the "Oregon Commercial Fisheries Code" is now available from the Oregon Fish Commission, 307 State Office Bldg., Portland 1, Oregon. This handbook of commercial fishing laws contains a compilation of State regulations relating to the protection and propagation of fish and shellfish.

Herring Catch Quota Raised In Southeastern Alaska

Improved conditions in the herring fishery of southeastern Alaska will permit the catch quota for reduction purposes to be increased to 17,500 tons (140,000 barrels) during the 1956 fishing season. In 1955, the catch quota was limited to 100,000 barrels.

Of the 1956 total of 17,500 tons, a limit of 6,250 tons (50,000 barrels) will be permitted from the important Sitka populations. In addition, two small areas that previously were closed to fishing will be opened this year for the taking of herring for use as bait. One of these areas is in Silver Bay, at Sitka; the other at Fish Egg Island, Craig. In each area herring fishing is restricted to a take of 125 short tons for bait purposes. There is no change in the regulations for Prince William Sound and Kodiak.

Fish & Wildlife Service biologists report that Alaska herring are increasing from their low numbers of past years. Natural conditions in Alaskan waters during the past three or four years have been favorable for the growth of herring, as a result of which a gain in the 1956 supply is indicated.

The Fish & Wildlife Service's regulations for 1956 will prepare the stage for further research to test the effects of fishing on the conservation of Alaska herring by setting aside the Juneau herring population for study purposes. Purse seining of these fish, except for bait, will be prohibited.

At the same time the Service is allowing limited fishing on the Sitka, Craig, and Ketchikan herring stocks. Careful studies of spawning and population growth will point up the effects on the fishery.

The five-year study program will be carried out with the active participation of herring fishermen, Alaska salmon trollers, and herring bait fishermen. By the end of that time, the southeastern Alaska herring catch is expected to be on a maximum sustained yield basis.

Long Island Fish and Shellfish Landings Show Increase

Landings of fish and shellfish in the marine district of New York during the first eleven months of 1955, excluding purse-seine-caught menhaden, amounted to 42.1 million pounds valued at 7.3 million dollars. Compared with the volume and value of the landings reported for the corresponding period of 1954, this was an increase of 8 percent in quantity and 22 percent in value.

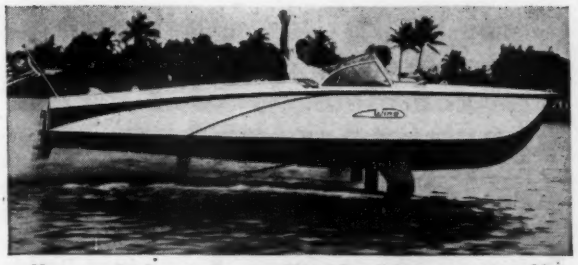
During November seafood landings amounted to 3.4 million pounds valued at $628,000 to the fishermen. Compared with the receipts reported for the corresponding month of 1954, this was an increase of 12 percent in volume and 7 percent in value. Increased landings of whiting were the principal cause for the gain in production.

Inlet Improvement Bill Introduced

Rep. Frank J. Becker of Nassau County introduced a bill last month calling for the appropriation of the Federal Government's $840,000 share of the proposed $2,000,000 Fire Island Inlet improvement project. The bill calls for the spending of $4,392,000 over the next 15 years should it be needed for combating hurricane and storm damage between Fire Island and Jones Inlets.

The Long Island Fishermen's Assoc. and the East Islip Anglers and Boating Assoc. recently indicated their approval of the Islip Town Board's refusal to contribute $97,000 toward the Fire Island Inlet project.

Nicholas Griek, secretary of the Long Island organization, said that its board of directors unanimously upheld the town in its refusal to share the cost of the erosion control plan. Both groups took issue with Park Commissioner Robert Moses' statement that Moriches Inlet should be abandoned.



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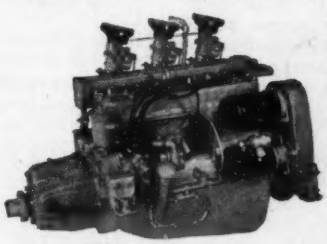

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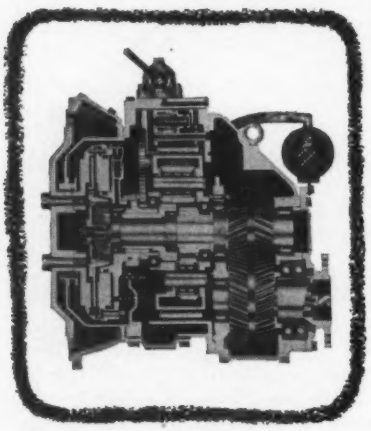

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North Carolina Fishermen Making Good Rockfish Catches

Bad weather this year has made the season a little late, but about the middle of February most fishermen in Dare County had their nets in and some good catches were reported. One of these good catches was made by Basil Daniels and crew of Wanchese, who are reported to have sold their rockfish for about $1,300.

Another good catch of rock was reported to have been made early last month at Oregon Inlet by Wanchese fishermen. Weight of the catch was heavy, with the largest fish around 65 pounds. Some over 200 were caught, and it is said that one haul yielded 165 of the species.

Herring were reported running early, and one fisherman at Wanchese caught 130 boxes in one day. This means about 200 to the box.

Largest catch of shad was reported from Wanchese, where one crew got 110 in a day. Shad were selling locally for 40 to 41 cents a pound for roes, and 20 for bucks.

Fishing last month was picking up on the west side of Croatan and Pamlico Sounds, with the highest catch of shad—83—reported by a Manns Harbor fisherman.

Taking Hard Crabs in Traps

Crab fishermen last month were setting traps in coastal waters, but the price is only about 3½ cents a pound, far below the peak of 11 cents last Spring. The traps must be set to allow at least a third of the water passage open for boats, according to Fisheries Commissioner Holland. When the crab pots were first put out in large numbers last year, many fishermen objected to the new method of taking them. But the fishery proved so profitable that efforts to curb crab pot usage have not been very successful.

Oyster Season Closes

The oyster season of the State closed on March 1, and on March 5 the State started an oyster seed and shell planting program in the Point of Marsh area. C. Gehrmann Holland, Commercial Fisheries Commissioner, said the planting will take place where there has been overfishing and where it is known the seed will grow.

Fisheries Association Elects

The commercial fishermen of the North Carolina Fisheries Assoc. at their annual meeting in Washington last month elected officers for the coming year and planned intensified membership activities in all fishing areas of the coast. Garland Fulcher of Oriental was named president; Earl W. Holland of Vandemere, vice-president; and George B. Garner of New Bern was re-elected secretary-treasurer.

Directors elected by the Association were: Lewis Hardee, Southport; Otis Purifoy, Morehead City; Garland Fulcher; and Dick O'Neal, Hatteras. In the fisheries classification those elected were: Roy Watson, finfish; Sam McCotter, shellfish; Clayton Fulcher, Jr., shrimp; Clyde Potter, crabs; and George Wallace, non-edible fish. Directors-at-large elected were William A. Ellison, Jr., I. J. Hudson and W. H. Potter.

Heavy Menhaden Production

Landings of fish and shellfish at North Carolina ports during November amounted to 68.3 million pounds. Compared with the 8.0 million pounds of all species reported for the previous month, this very large gain was due to greatly increased catches of menhaden.

During November, menhaden led all other species landed and accounted for 96 percent of the month's total production. Shrimp was in second place, followed by hard crabs and spot.

Chief Enforcement Officer

Leon Thomas of Marshallberg and Edenton started work last month as chief law enforcement officer with the State Commercial Fisheries Division. Mr. Thomas was formerly with the State Wildlife Resources Commission as chief law enforcement supervisor.

Georgia Bill Would Cut Closed Season on Crabs

A bill before the General Assembly, HB-113, would limit the closed season on taking of spawning female crabs. The present law, enacted last year, bans the taking of such crabs the year around. It has been assailed by the commercial crab industry, which centers at Brunswick.

The State Game & Fish Commission is lending its support to making the closed season from May 1 to June 30, the height of the spawning season, and this has found favor among Brunswick crab fishermen. The bill now reads to make the closed season from April 15 to June 30, but it is understood an amendment will be offered making the beginning date May 1.

Some Savannah sports fishermen are opposing shortening of the closed season, arguing the law is for the protection of the crabbing industry as much as for the man catching crabs only for his own family.

Rhode Island Fishermen Making Good Quahaug Hauls in Allen Harbor

Narragansett Bay shellfishermen, enjoying their biggest bonanza in many years, took more than 2,000 bushels of quahaugs in one day last month when Allen Harbor was reopened to shellfishing. The harbor has been closed to fishermen for 16 years by the Navy, and when it was reopened a record number of 267 quahaug boats were on hand. Security patrols continued to guard the harbor shores, but the Navy had agreed not to molest the shellfishermen unless they attempted to land.

As a result of the glutting of the market caused by the first few days of quahauging, when 10,000 bushels of the shellfish were brought in, it has been proposed that the legal daily limit on quahaug catches be reduced from 20 to 10 bushels.

Favors Converting Armory to Shellfish Processing Plant

John L. Rego, director of the Dept. of Agriculture and Conservation, recently gave his support to the idea of using the old National Guard armory in Bristol as a shellfish processing plant. The National Guard is having a new building erected, and it has been suggested that they give the old armory to the city. The city could then give or sell it to the group interested in converting it to a processing plant.

Striped Bass Legislation

Two bills aimed at protecting striped bass against seiners were introduced in the legislature by Sen. James J. Pollitt of Pawtucket.

One of the bills would limit the taking of stripers to trap fishermen, hook and line sportsmen and those using spears. Seiners would be barred.

The other bill would allow trap fishermen to take stripers, but would prevent the setting of leads from shore to traps between Sept. 1 and Dec. 1.

Oyster Bar in State House

Sen. Charles J. Link of Charlestown set up a free oyster bar in a committee room of the General Assembly at the State House last month. It was his way of saying thanks to the legislators for the $1,500 they appropriated last year to help the propagation of oysters in Charlestown Pond. The artificial propagation methods introduced at the pond by the State Division of Fish & Game already have greatly increased the set of shellfish there.

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Mississippi Opens Four Oyster Reefs to Dredgers

Four oyster reefs in the Mississippi Sound were ordered opened on February 7 to commercial dredging, following an inspection of the reefs by the Seafood Commission and members of the Mississippi Legislature.

The two-year-old reefs, planted and nurtured to development by the Commission, are expected to produce their best supply of oysters to date. Reefs opened include Henderson Point, Herrin Bay, Square Handkerchief and St. Joe Channel.

All other reefs will be closed to power dredging because of young growth of oysters that are not ready for harvest. However, tonging reefs of Pass Christian are open to hand tonging.

"Oregon" on Deep-Water Red Shrimp Cruise

The exploratory fishing vessel *Oregon* left Pascagoula on February 15 to conduct two weeks of commercial-scale trawling for deep-water red shrimp off the coasts of Mississippi, Alabama and Western Florida. During the cruise 74 and 100-ft. trawls will be worked to obtain information on commercial catch potentials for red shrimp for this season.

On the vessel's previous cruise through the north central Caribbean and central Gulf of Mexico, generally poor fishing results were obtained. The total catch was 29 yellowfin tuna and 19 albacore.

All live yellowfin, blue marlin and white marlin were tagged and released in cooperation with the Woods Hole Oceanographic Institution.

Seafood Production Shows Big Gain

Receipts of fish and shellfish at Mississippi ports for the first eleven months of 1955 amounted to 151.4 million pounds—an increase of 46 percent compared with the production for the corresponding period of 1954. During this period of 1955, menhaden led all other species, followed by shrimp, oysters and hard crabs.

During November, seafood landings amounted to 1.3 million pounds, compared with 1.8 million pounds reported for the same month of the previous year. A drop in the shrimp catch was mainly responsible for this decline. However, shrimp was the leading species taken during November, and made up 74 percent of the month's total production.

Says Fresh-Water Fishery Could Be Expanded

Fifty or more families in Vicksburg derive their livelihood from the catfish, buffalo and carp of the rivers and lakes in a thirty mile radius of the city. T. J. Furr, who has been buying and selling commercial fish for 30 years, says this area could realize far more than it does from its natural resources of fish, turtles and other freshwater products.

Mr. Furr maintains that commercial fish production could be stepped up many fold, improving, rather than damaging, game fishing. He believes that Eagle Lake alone is good for an average of a thousand pounds of rough commercial fish a day, and it could produce more with beneficial results to game fishing.

Maryland Shucked Oysters Are in Good Demand

According to Crisfield oyster packers, the demand for shucked oysters this season as a whole has been very good. The packers, however, have been handicapped somewhat due to a scarcity of shell stock. A big factor in the cause of the scarcity is said to have been the bad weather, which has kept the oystermen on shore.

However, in February the weather improved and tongers in the Tangier and Pocomoke Sounds, Annamessex and Manokin Rivers and Holland Straits were getting good hauls.

Oystermen in Worcester County believe that the number of oysters planted in the Chincoteague Bay area for the coming year will be next to nothing, unless the price of seed oysters in the Chesapeake Bay area drops before the end of the planting season this April.

In previous years, up to 50,000 bushels of three inch seed oysters have been planted in the area, with most of the planting taking place in the Fall and the balance in the Spring. Due to the high cost of Chesapeake Bay area seed oysters, only about 1,000 bushels were planted this past Fall.

First Herring Appear

The first herring of the season came into market the second week in February. They were large and in good shape and most of them were roe herring, which means there should be a good supply of roe for sale from now on. Frequently, herring and shad do not show up until the first week in March or later.

Oyster Export Tax Bill Dies

The bill to tax all oysters exported from Maryland 25 cents per bushel was reported unfavorably by the Chesapeake Bay and Tributaries Committee in the House at Annapolis last month.

Huge Hard Crab Landed

Last month Capt. Otis Linton caught a hard crab which was the largest one he ever has seen caught in local waters, or in the Chesapeake Bay. The crab measured nine inches from tip to tip of the shell, eleven inches from elbow of its claw, and with claws extended, it had a reach of 21 inches. Its eyes were three and a half inches apart, and the measurement across it back was over 4".

Mitchell Joins Tilghman Island Packing

David H. Mitchell has accepted the position of assistant to George Harrison, president of the Tilghman Island Packing Co. Mr. Mitchell was associated with the Birds Eye Division of General Foods for the past ten years. He was Port Captain for General Foods in Boston, supervising 16 trawlers.

The Tilghman Packing Co., one of Maryland's oldest seafood firms, recently has ventured into new fields through research. The plant collects fish scales, processes them to remove the tiny particles of silvery substance, which are then combined with lacquers and drying agents to coat tiny glass beads and other ornaments.

Up until 1950 the firm operated principally as a canner of seafood products. Since then they also have been engaged in freezing crab and oyster products.

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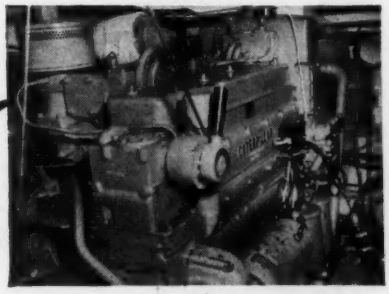

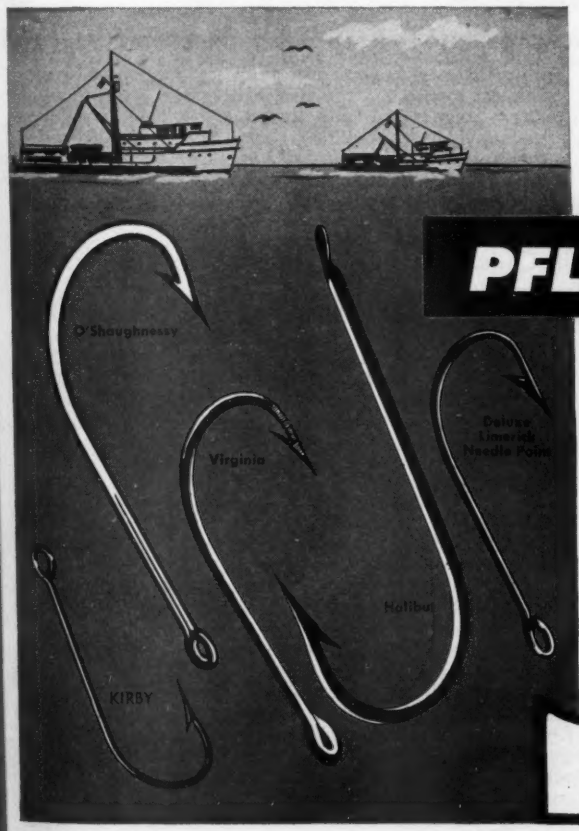

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Texas Biologists Study Effect Of Explosions on Marine Life

Biologists of the Texas Game and Fish Commission conducted tests in Corpus Christi Bay recently to determine the effect of explosions on marine life. Cooperating with a seismograph crew operating off Ingleside, marine biologist Bob Kemp of Rockport and two assistants conducted the experiments.

Specimen baskets of marine life, including oysters, crabs, shrimp and fish, were placed at intervals from 25 to 200 feet from the 40-pound charge of dynamite that was exploded in a hole 20 feet deep under 12 feet of water. Following the explosion, the baskets were checked by the biologists who reported that crabs and shrimp apparently were not bothered; only a few of the fish were killed, and some oysters were casualties.

Commercial fishermen and shrimp boat operators in Corpus Christi Bay were surprised at the results. They long have contended that all underwater shooting is extremely harmful to marine life.

C. W. Reid, director of coastal fisheries for the Texas Game and Fish Commission, said that in view of the conflicting results reported from tests made by other States, mainly Louisiana and California, the Texas Commission is anxious to pin down actual damages done by seismograph explosions.

Shrimper Springs Leak and Goes Aground

The shrimp trawler *Donald Faye* sprang a leak in the Gulf of Mexico about one mile south of the Matagorda lighthouse last month. Believing the vessel was sinking, Capt. George D. Branch and crewmen V. J. Roberts and J. J. Givens decided to abandon the vessel and swim ashore. Capt. Branch and Givens reached the beach, but Roberts was lost.

The trawler, owned by Vernon Crotts of Aransas Pass, went aground in about five feet of water.

Amend Lease to Keep Shrimp Fleet from Moving

An ordinance was passed by the City Council at Corpus Christi last month to keep the shrimp fleet from moving. The new amendment will give the city title to Sydney Herndon's L-head building, and will give Herndon cheaper rent during the life of his lease.

When his lease expires on Jan. 1, 1961, the city will own all of Herndon's facilities, including a Diesel fuel storage tank he intends to install.

Bill Calls for Improving Matagorda Channel

A bill has been introduced recently by Congressman Clark W. Thompson of Texas, which would authorize an Army Engineer project to improve the deep draft navigation channel from the Gulf of Mexico through Pass Cavallo to Point Comfort, Texas, designated as the Matagorda Ship Channel. The project, which is of interest to the Texas shrimp industry, would cost an estimated $9,041,000.

Finfish Plentiful

Edible finfish from the bays were plentiful during the 30-day period ending Feb. 23. Black drum, in sizes up to 60 pounds, have been taken in large quantities all along the coast. Red drum and speckled sea trout catches have been seasonal, with prices 18 to 22 cents per pound to fishermen for selective sizes.

Red snapper production has been hampered by unfavorable weather conditions in the open Gulf, but even so, landings were in excess of 130,000 pounds. Total edible finfish landings were 358,300 pounds.

Oyster production has slowed down to a trickle. The only commercial production came from Galveston Bay. Rockport oysters from the middle coast were insufficient in quantity to meet local demand.

Shrimp landings continued low during the 30-day

period ending Feb. 23. With bays closed to all but bait boats, production was confined to fringe areas along the middle and upper Texas coast and the deep south Gulf off the Mexican coast.

Landings at Port Isabel and Brownsville were a little above average for this period, while Aransas Pass area dropped some. Brown grooved shrimp of large size made up the catch from the lower coast.

Landings at principal ports for the period totalled 1,320,400 pounds of heads-off shrimp, as compared with 1,283,400 pounds for the previous 30 days.

Identification for Shrimp Association Members

Officials of the Shrimp Association of the Americas report that a metal plate will be furnished for boats of all members fishing and shrimping in Gulf waters. The plate will be permanently attached to the upper deck and will certify the owner of the boat as a member of the Association. Boats so marked will be able to land at Mexican ports for provisions, emergency supplies, and for repairs without ordinary red tape proceedings.

Larger Trolling Lures

(Continued from page 15)

10% of them less than 26 in. (total length), while the spoons captured a higher proportion of small fish.

The trend in recent years to use more large plugs for catching spring salmon off the west coast of Vancouver Island should have the advantage of capturing fewer coho salmon prior to the opening of the season on June 16 and of protecting more small spring salmon under 26 in. total length. However, the large spoon is still an old favorite, and it apparently catches a considerable number of both small coho and spring salmon.

Large Spring Salmon Eat Herring

The examination of the stomach contents revealed that the larger spring salmon were eating more fish than the smaller salmon. For example, 61% of the stomachs from spring salmon over 26 in. (total length) contained fish, while only 33% of the stomachs from smaller salmon had fish in them. The salmon caught by the larger lures were feeding more on fish than were those taken by the smaller lures.

Consequently, the most striking relationship is that the large plugs caught chiefly large spring salmon that were feeding on a fish diet. Other relationships between size of salmon, lures and food are less obvious, but the small spring salmon appeared to be taken more readily on small lures while feeding on invertebrates or when their stomachs were empty.

Herring was the dominant food in the stomachs of the spring salmon. For the large salmon over 26 in., one-half of the stomachs contained herring, while for the salmon below this length only one-fifth of the stomachs had herring in them. The size of the herring consumed ranged from 5.9 to 7.5 in. in standard length. Since this is the same length as the 6- and 7-inch plugs commonly used as lures, vision must play an important role in both feeding and troll fishing.

In this connection the color of the lure is an important factor which was not tested in this experiment. It is of interest that the herring being eaten were smaller than 70% of the herring sampled from the small nearby Summer fishery at Swiftsure Bank. For some reason, probably size of mouth, the spring salmon were restricted to eating only the smaller herring which would have been recruited to the herring fishery in the following two Winters. Therefore, it appears that the heavy Winter fishery on large herring does not directly affect the food supply of spring salmon in this area. In fact, the larger herring are probably competing for the same basic plankton forms as the other organisms which make up the balance of the diet of spring salmon.

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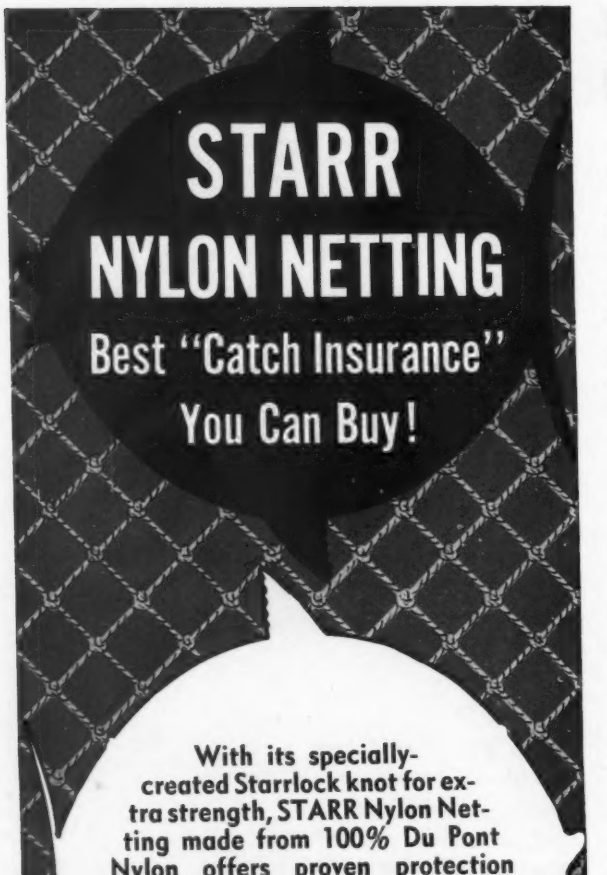
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Massachusetts Fishway Proves Successful in Passing Shad

At a meeting in Boston on February 3 of Wildlife Conservation, Inc., John L. Farley, Director of the Fish & Wildlife Service, presented an award to Robert E. Barrett, Jr., president of the Holyoke Water Power Co., for the newly-developed fishway which has been completed at the South Hadley Falls Dam on the Connecticut River.

The power company has worked since 1949 to seek a satisfactory solution to the problem of shad passage at the South Hadley Falls Dam. The newly-developed fishway has succeeded in reopening a fishery which has been closed for more than a century. Both sport and commercial fishermen are expected to benefit from the re-establishment of the shad fishery in this area.

In 1949 the power company sent an engineer to the West Coast to study fish passage facilities in that region. During the Summer of 1950 the company participated in fishway model studies to make determinations on the hydraulic conditions which would prevail at the fishway and to test the reactions of fish to these conditions. In 1952, a new fishway began operation, but this one was not successful.

During the Spring of 1955 power company officials designed and installed a new automatic hopper device. This proved to be successful and nearly 5,000 shad were lifted over the Holyoke Dam. For the first time in 107 years, considerable numbers of shad reached their ancestral spawning grounds.

Controversy over Deep-Water Lobstering

Francis W. Sargent, Director of the Division of Marine Fisheries, disclosed last month that controversy and misunderstanding recently have developed among persons in the lobster industry both in Massachusetts and in Maine concerning deep-water lobster trawling experiments being conducted aboard the research trawler *Delaware*. Allegations have been made that deep-water lobster trawling will wipe out the coastal lobster fishery.

The *Delaware* recently returned from a two-week cruise along the edge of the Continental Shelf around one hundred miles offshore where more than a thousand lobsters were caught in water ranging from 600 to 2400 feet deep. Scientists were aboard the *Delaware* attaching serially-numbered metal tags to the lobsters and releasing some in inshore Massachusetts waters and some far offshore.

The primary purpose of the project is to determine whether or not these recently-discovered lobsters have any relationship to the inshore lobster stocks customarily fished by local lobstermen. They also seek to determine whether or not there are sufficient lobsters lying untouched offshore to support a commercial operation. Sargent feels that these offshore lobsters have little, if any, intermigration with the coastal stocks.

However, Harold W. Look of Rockland, Maine, a wholesale lobster dealer, believes that there is evidence to challenge the theory that the offshore and inshore lobsters are of different species. He feels that dragging up the big offshore lobsters and shutting off their huge egg production may soon adversely affect inshore lobstering.

Look believes that lobster eggs, during their ninety-day flotation period, move in a circular current pattern around the Gulf of Maine, and he maintains that it is possible that the fry could settle to the bottom around the entire perimeter of the Gulf of Maine, with a few going back to the place of their birth. Look further stated that this would indicate that the offshore grounds are the breeding source of inshore lobsters.

Tax Deduction for Boat Depreciation

State Rep. John Armstrong of Plymouth has introduced a bill which would allow fishing boat owners as well as all other boat owners to put in for depreciation on their boats in making out their State income taxes.

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Louisiana Opens Seed Oyster Reservation to Dredging

Oyster dredging was permitted in Sister Lake, the State seed oyster reservation in Terrebonne Parish, beginning February 10, and will continue until further notice.

All boats operating in the Lake must secure a permit from the Commission's camp before beginning dredging, and the boats must return to the camp for a cargo check before departing. Dredging permits are to be issued only to properly licensed boats.

Inside Shrimp Season Closed

L. D. Young, Jr., director of the Louisiana Wild Life and Fisheries Commission, announced that the shrimping season in Louisiana's inside waters was closed February 15 and will reopen April 15. In closed season, bait shrimp may be taken from the inside waters in the amount of five pounds per person or 50 pounds in the aggregate by any one boat.

Progress on Oyster Research

The first year of research on South Atlantic and Gulf Coast oysters under the Saltonstall-Kennedy program has brought out several significant developments that will be of importance to the oyster industry. In the investigation of the circumstances under which live oysters bleed, it is becoming apparent that the fluid content of an oyster is extremely adaptable to change or modification.

Oysters were placed in water baths at temperatures of 100, 108 and 113° F. for varying periods of time and then returned to the stock aquaria held at 72° F. Mortality and weight loss were determined at several time intervals for the oysters which had been exposed to each of these temperatures.

Exposure to the temperature of 100° F. had no effect upon the oysters. Oysters kept at 108° F. lost approximately 17 percent of their body fluids after 120 minutes of immersion, at which time 50 percent of the oysters were dead. At 113° F., 50 percent of the oysters died after 27 minutes of immersion, at which time the oysters had lost about 25 percent of their original body weight.

Analysis of the data obtained to date showed that the death of oysters may be caused by either the heat effects or by bleeding. Heat probably alters the oyster's structural proteins and causes a loss of membrane semi-permeability, resulting in fluid loss by the tissues.

New Jersey Fishing Boats and Docks Damaged by Fire

A skidding automobile last month touched off a fire that caused an estimated $125,000 damage at Ottens Harbor fish docks, Wildwood. The car crashed into the base of a marine fuel storage tank, breaking off a 2-inch feed pipe. White gasoline poured out and was ignited.

The fire started in a section of docks occupied by the O. K. Fisheries. The flames spread quickly over the docks, damaging five fishing boats, docking facilities and a gravity gasoline tank.

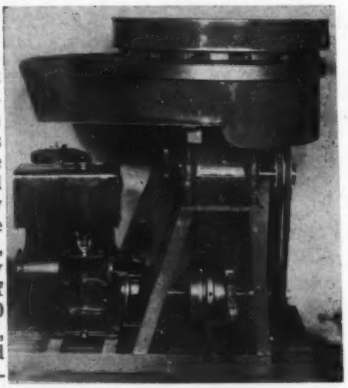
One commercial fishing boat and the automobile were completely destroyed. The docks remained standing and were not damaged beyond repair, but stacked fish shipping boxes were demolished.

Seafood Production Shows Gain

Total landings of fish and shellfish for the first eleven months of 1955 amounted to 404.6 million pounds, compared with 400.0 million pounds for the same period of the previous year. Leading species were menhaden, scup or porgy, surf clams, fluke and sea bass.

EQUIPMENT and SUPPLY NEWS

Crossley Lifters for Nets, Hook Lines



Crossley net lifter.

The result of 30 years of net lifter manufacturing experience, the Crossley net lifter has been developed into an item of equipment that is virtually trouble-free from a mechanical standpoint. Especially designed to meet the needs of the fisheries, it is made by Crossley Co., Subsidiary of Techno Corp., 16-30 West 5th St., Erie, Pa., who have worked closely with the fishing industry and realize the conditions under which net lifters must operate.

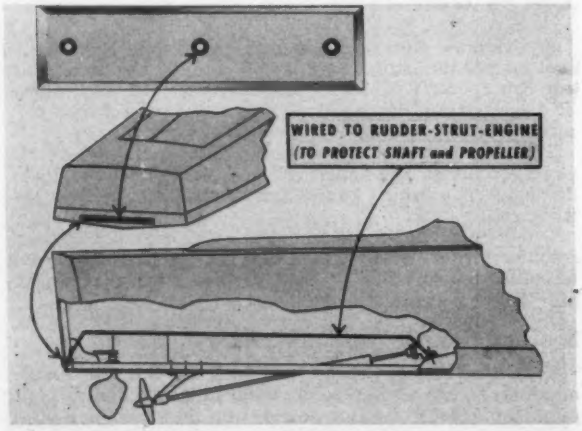
The Crossley net lifter drives through a spring to cushion the head and protect the netting against snagging or undue strain in a heavy seaway. In the event of spring breakage, an ingenious arrangement has been made through the hub that drives this spring so that an ordinary bolt or pin may be inserted to complete the day's haul without changing springs.

The power source and main drive of the Crossley net lifter consists of a Briggs & Stratton engine and Twin Disc clutch, both of which are serviced throughout the United States by local factory-established service organizations. In conjunction with these units, the drive from the clutch shaft to the gear case is by standard V-belts and pulleys.

Crossley net lifters operate at speeds ranging from 90′ to 270′ per minute, on all gill net and hook line fishing boats. Net Lifter No. 132 is available with 24″ or 30″ head and 11″ or 16″ roller equipment. Model No. 18 has a 12″ head and 9″ roller. They are designed for either port or starboard use.

New Electrolytic Corrosion Inhibitor

The Michigan Wheel Co. recently announced what they term a new concept of electrolytic corrosion control, consisting of one or more 2 lb. plates of 99.99% pure zinc, which are placed in any suitable location and electrically connected to the parts to be protected. Usual placement is just below the waterline in the case of displacement hulls.



Sketch showing how electrolysis inhibitor made by Michigan Wheel Co. is wired to rudder, strut and engine to protect shaft and propeller.

Advantages claimed by the manufacturers are as follows: 1. The inhibitor can be inspected and replaced while the boat remains in the water. 2. Inhibitors are not fastened to the part to be protected beneath the boat, thus eliminating drag and other water disturbances which are caused by hit-or-miss methods of attaching chunks of zinc of unknown quality to various underwater parts. (Unless it is pure, zinc is next to worthless as an inhibitor.) 3. Inhibitors can be electrically connected one to another to insure adequate sacrificial material is present, to protect all parts otherwise affected.

Complete details on the new electrolytic corrosion control will be found in the Michigan Wheel Inboard Catalog, a copy of which is available from Michigan Wheel Co. dealers or by writing to the factory at Grand Rapids, Michigan.

DuChane, New Bendix Sales Representative

Donald E. DuChane.

The appointment of Donald E. DuChane as marine sales representative for Pacific Division, Bendix Aviation Corp., was announced recently by Walter P. Rhea, manager of the Marine Department. As a member of the sales staff, Mr. DuChane will contact dealers on sales and service of Bendix marine products in Southern California.

Prior to his association with Bendix, Mr. DuChane conducted testing operations of sonar gear for the U. S. Navy. He attended El Camino College, University of California, Los Angeles, and is a graduate of the Army Language School.

To Distribute Olympic Trawl Cable Meters

Olympic Instrument Laboratories, Cove, Wash., recently appointed several new distributors for its trawl cable meters. These meters save the time and expense of marking trawl cable, and are said to be particularly valuable in mid-water trawling.

The new distributors include: Paulsen-Webber Cordage Corp., 170-176 John St., New York 38, N. Y., which has the East and Gulf Coasts as its territory; Seaside Supply Stores, Inc., 803 So. Palos Verdes St., San Pedro, Calif., with Southern California and Central and South America as its territory; Cincotta Brothers, 169 Jefferson St., San Francisco 11, Calif., whose territory will be Northern California; Pacific Fishermen, Inc., 5351-24th Ave. N. W., Seattle 7, Wash., who will represent the firm in Oregon, Washington and Alaska.

Two New Edo Distributors Named

The Edo Corporation of College Point, New York, manufacturer of marine electronic equipment, has appointed two new distributors in the Southern and Gulf areas. Huston Terra-Marine of Corpus Christi has been named Edo distributor for the State of Texas, and Rich Electronics, Inc., of Miami is the new Edo distributor for the southern half of Florida.

Electronic equipment manufactured by Edo for commercial use includes loran, radar, survey depth recorders and the Fishscope. In addition, a variety of Edo electronic systems are in widespread use by the U. S. Navy.

Philplug Compound for Re-Setting Screws

Permanent, solid installation of all re-set screws and nails in any hole can be accomplished with "Philplug" compound, a new product of New England Carbide Tool Co., Inc., 60 Brookline St., Cambridge 39, Mass. The compound was formulated to eliminate the difficulty of getting a replacement screw into wood that has rotted and will not hold it.

Once inserted in the Philplug compound, a screw will not rust as Philplug contains a de-oxidizing ingredient. Tests with screws inserted in Philplug and immersed in sea water for over two years, have shown that the screws were permanently anchored without shrinking or deterioration of the compound.

Philplug is a mixture of asbestos and cementitious powders, which can be moistened with a little water, rolled into a plug and tamped into the hole. As soon as the hole is filled with Philplug, the screw can be inserted immediately. Should there be a need for removing a screw which has been set in Philplug, it will come out easily as the screw forms a perfect thread in the compound.

Moran Heads Texas Company Marine Sales

Joseph H. Moran.
(Jean Raeburn Photo)

Joseph H. Moran has been appointed Manager, Marine Sales Division, of The Texas Company's Domestic Sales Department. He succeeds the late J. G. van Santvoord, and his headquarters will be in New York.

Mr. Moran has been Assistant Manager (Industrial Sales) of Texaco's Southern Territory, with headquarters at Houston, since 1945. He was graduated with a B.S. degree in 1925 from the Virginia Polytechnic Institute, and two years later he received a degree in Electrical Engineering.

Moran started work with The Texas Company as a Lubrication Engineer, Sales Department, in 1930 at Nashville, Tennessee.

Rust-Oleum Catalog on Rust Preventives

The new 1956 general catalog of the Rust-Oleum Corp., 2799 Oakton St., Evanston, Ill., manufacturers of rust preventive products for over 30 years, is now available. This 28-page catalog has illustrations of Rust-Oleum uses and applications throughout industry.

There are 102 color chips showing the many Rust-Oleum colors available in primers, short oil type coatings, long oil type coatings, Galvinoleum coatings, chemical resistant coatings, and floor and deck coatings.

Important highlights of the catalog are the two pages devoted to Rust-Oleum penetration through rust to bare metal, and the new Rust-Oleum Galvinoleum coatings, specially formulated to be applied right over new galvanized, aluminum, and terne plate surfaces without etching or excessive weathering.

Catalog on Fish Plant Machinery

Complete equipment for fish reduction plants and canneries is described and illustrated in a new two-color, 24-page catalog produced by Standard Steel Corp. Drawings, photographs and text provide data on complete plants in all commercial sizes for fish meal, crude fish oil, fish oil refining and condensed fish solubles, along with fish cannery equipment.

To obtain a copy of the catalog, write K. G. Thies, sales manager, Standard Steel Corp., 5001 South Boyle Ave., Los Angeles 58, Calif.

Gosheff, GM Sales Representative in Florida

D. P. Gosheff.

The appointment of D. P. Gosheff as sales representative of the Detroit Diesel Engine Division of General Motors, Florida branch, has been announced by R. A. Hill, branch manager. In his new capacity, Mr. Gosheff will coordinate the Diesel sales activities of Florida marine and industrial dealers with operations at Detroit Diesel branch headquarters at Miami and the sub-branch at Jacksonville. In Jacksonville he will work with Roy Kuhns, who is manager of that operation.

Mr. Gosheff's recent affiliation was with Chrysler Corporation, where he was sales representative contacting manufacturers, and industrial and marine engine dealers in the 9-State area of the Mississippi Valley. He also has been a sales representative of the General Engine and Equipment Co. of Tampa, Detroit Diesel dealers for the Florida West Coast.

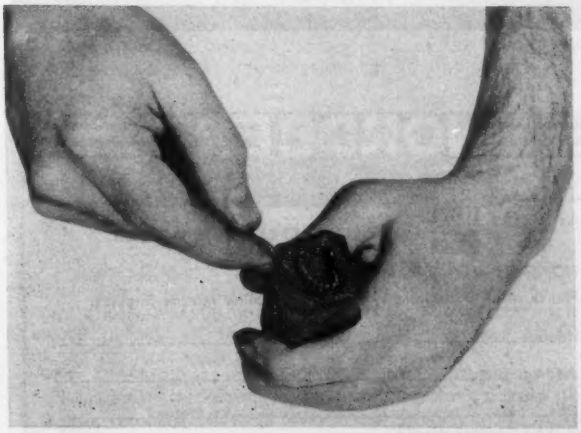
Murphy Marine Engine Bulletin Available

Bulletin 127, released by Murphy Diesel Co., 5317 West Burnham St., Milwaukee, Wis., gives details of advanced design features and output data on their line of propulsion engines, auxiliaries, generator sets and power units designed for marine applications. In addition, this bulletin illustrates the wide variety of jobs being performed by Murphy equipment in marine service.

Re-setting Lengthens Life of Fish Hooks

A simple but effective type of hook setter for use in the boat has been reported in Nova Scotia by Robert R. Klein, Canadian Sales Representative for the Enterprise Mfg. Co., makers of Pflueger hooks. By using the hook setter, fishermen have greatly increased service they get from a particular hook. Mr. Klein says that Nova Scotian fishermen tell him Pflueger hooks can be re-set over and over again with the hook setter without appreciable breakage.

The hook setter is hand made from a block of wood measuring about 3½ x 1¼ x 1¼ inches. The bottom is U-shaped so that it will fit into the gunwale. On the top is a row of nails close together to form a pattern for the particular size and shape of hook. By inserting the barb behind a small flange and bending the hook around the nails, the fisherman can quickly reset the hook before baiting.

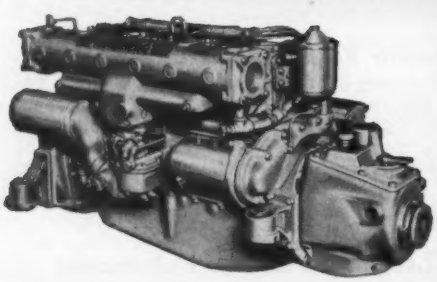


Re-setting a fish hook on a Nova Scotia hook setter, by inserting the barb behind a small flange and bending the hook around the nails, which are mounted on a small block of wood.

look to Nordberg in 1956

NORDBERG

for a NEW HIGH in performance and dependability



Each year, since the production of the first Nordberg Gasoline Marine Engine, new improvements in design and operation have helped to establish the ever-increasing popularity of these modern engines among fishing vessel owners and builders from coast to coast.

In 1956, all seven Nordberg Gasoline Marine Engine models, from the 60 hp *COLT* up through the power-packed 155 hp *KNIGHT*, will give you a *new high* in *performance* and in *dependability* . . . through additional refinements in design and construction that make the 1956 engine line the best ever to bear the famous *Nordberg* name. Mail the coupon for full details.

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GASOLINE MARINE ENGINES

MAIL COUPON NOW NF

NORDBERG MFG. CO., Milwaukee 1, Wis.

Please send literature on Nordberg Gasoline Marine Engines.

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Address_____

City_____ Zone____ State_____

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Boat Insurance Costs

(Continued from page 13)

including one requiring officers of seagoing vessels of more than 200 tons to be licensed, and a fishing vessel of that tonnage would be subject to such requirement.

Fishing Vessels Inspected in Canada

In an effort to control accidents and losses on fishing vessels, many maritime nations, perhaps a majority, have put into effect laws and regulations governing the construction, maintenance, and safety of operations of fishing vessels. In Canada a fishing vessel in excess of 15 tons gross tonnage is subject to inspection of the hull, machinery and safety equipment in the manner set out in the Canada Shipping Act and Regulations thereunder. These regulations were prepared in consultation with the Canadian fishing industry. The enforcing Government Department is the Canadian Board of Steamship Inspection.

In Great Britain the laws pertaining to fishing vessels appear to take as their beginning point the background fact that Lloyd's inspects and classifies the larger fishing vessels, for the purpose of fixing rates, in accordance with type of hull structure, physical characteristics, etc. Unless a vessel is constructed in accordance with Lloyd's specifications for that particular class, insurance is unobtainable from a British insurer, or practically so, since the rates quoted without such classification become prohibitively high.

With this situation in the background the British Government does not, it appears, concern itself with fishing vessel classification or inspection certificates. The only laws and regulations applicable by their specific terms to fishing vessels pertain to fire fighting and lifesaving equipment. These vessels are not subject to periodic inspection, but are inspected at indefinite intervals to see to it that the fire fighting and lifesaving equipment is as required. If on the occasion of the spot check of the fire fighting and lifesaving equipment, the vessel is noted by the inspector to be in unseaworthy condition, operation is prohibited until the deficiencies are corrected.

Despite the absence of a legal requirement that these vessels have inspection certificates, the Ministry of Transport nevertheless has general authority to step in to prevent the unseaworthy fishing vessel from operating, and generally does so by notifying British customs to withhold clearance.

Seaworthy Certificates in Netherlands

In the Netherlands, all fishing vessels except undecked craft fishing within sight of the coast are subject to inspection and require a seaworthy certificate issued by the Shipping Inspection Service of the Ministry of Traffic and Public Works. New construction must be approved. Classification Society Survey Certificates (of approved societies) are accepted in lieu of Government inspection. General examination of hull, machinery, launching gear, radio, outboard fittings, and sea valves is required annually. Manning requirements are specified for seagoing fishing vessels of over 50 tons, based on size and type of vessel and length of voyage. A minimum number of qualified men for watch on deck at sea also is specified.

In Belgium all seagoing fishing vessels are subject to inspection. Certificates are good for one year. If a vessel is classified by an approved classification society, its seaworthy certificate is recognized. If not so classified, the inspection service conducts the examination but permits the owner to select the rules of a recognized society which are then used to govern the inspection.

In its operational details the scope of inspection and control exercised seems to be closely similar to the set-up in the Netherlands. Manning scales are established. Documents are issued for skippers (three grades); qualified sailors, and deck apprentices; and for engineers, assistant engineers, engineer apprentices and motor operators. Sometimes documents are issued to qualified deck

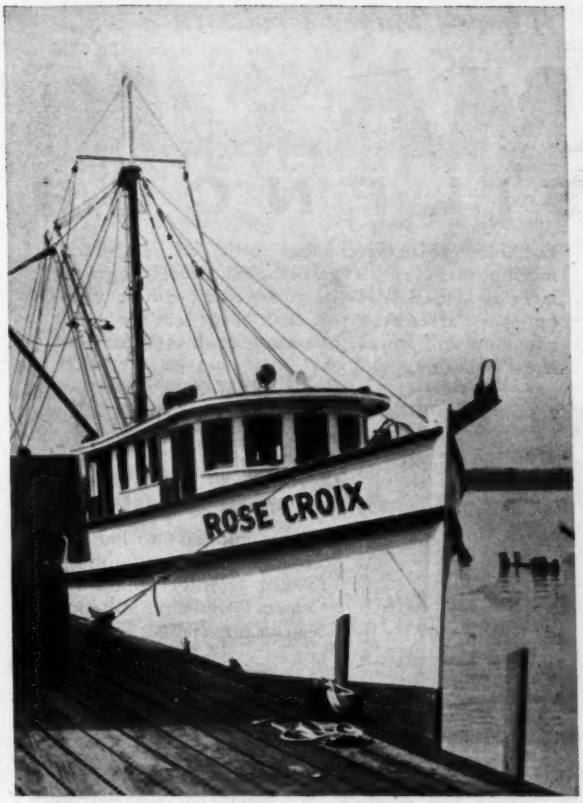
Tobin Bronze Shafting for this shrimp trawler built by Conrad Industries

The 65-foot standard shrimp trawler, "Rose Croix," built last year by Conrad Industries at Morgan City, La., is another of the ever-growing fleet of commercial vessels equipped with Tobin Bronze* Shafting. Power from her Caterpillar Diesel is delivered dependably by an 18' by 3" Tobin Bronze Shaft.

Tobin Bronze resists sea-water corrosion. It is strong . . . yet "gives" enough under sudden jars to lessen the chance of damage to bearings and housings. This shafting is turned for roundness and specially straightened. That reduces vibration.

To make sure it's Tobin Bronze, look for this propeller insigne. And for higher speed, heavier duty work, specify Tempaloy* Shafting. For corrosion-resistant fastenings and fittings, specify Everdur* Copper-Silicon Alloys. The American Brass Company, Waterbury 20, Conn. In Canada: Anaconda American Brass Ltd., New Toronto, Ont.

*Reg. U. S. Pat. Off. 56115



ANACONDA®
MARINE BRASS AND BRONZE

personnel in small fishing vessels not required to have engineers.

In conclusion, one thing appears quite clear, and that is if ever laws extending to inspection and safety requirements to fishing vessels should be adopted in this country, the system should be reasonable and have as its objective the retention of the bulk of equipment which the fishing industry now has while making it safer for the men. Corrective regulatory measures ought not to place an undue economic burden on the commercial fishing boat owner. Clearly, too, the details should be worked out in consultation with the fishing industry.

Alabama Shrimper Beached After Explosion and Fire

The 42-ft. shrimp boat *Marsha L.*, Capt. Salvatore Lochirco of Southport, was beached last month following an explosion and fire aboard the vessel. Capt. Lochirco was burned on the face and hands, but the other crew member aboard was uninjured.

The *Marsha L.* is owned by Capt. Vito Lochirco, father of the skipper, who reported that the shrimper was extensively damaged. The Coast Guard at Mobile advised ships in the area to proceed with caution until it was determined whether the crippled vessel was a menace to navigation.

Landings for Eleven Months

Total Alabama landings of all species of fish and shellfish during the first eleven months of 1955 amounted to 12.7 million pounds. Shrimp, hard crabs, mullet, oysters and red snapper made up 95 percent of this total.

Receipts of fish and shellfish at Alabama ports during November amounted to 855,000 pounds, compared with 895,000 pounds during the corresponding month of the previous year. This 4 percent decline was caused by moderate drops in the catches of hard crabs and shrimp. Shrimp, mullet, and red snapper comprised 82 percent of the total landings.

Coast Guard Inspects Shrimpers

The Coast Guard cutter *Sebago* out of Mobile reported in late January that there are 250 United States vessels from various Gulf ports currently shrimping on the Campeche Banks off the Mexican coast. Many of them are from Florida and some from Florida's Atlantic Coast area. It was estimated that they are catching between 100,000 and 150,000 pounds of shrimp a night. Shrimpers are averaging from 400 to 600 pounds to each boat per night.

During its 14-day patrol the *Sebago* inspected 94 vessels and rendered assistance to 30 persons. The 94 boardings were for the purpose of seeing that the shrimpers had proper safety and navigation equipment aboard.

Delaware Oyster Industry Valued at $5 Million

The value of the oyster industry of Delaware, which employs some 3,000 persons, was estimated at $5,000,000 for the fiscal year which ended last June 30. Items produced during the year included 4,000,000 cans of oyster stew, about 600,000 pounds of frozen canned oysters, 100,000 pounds of breaded frying oysters, and 300,000 gallons of fresh oysters.

The Commission of Shell Fisheries reported an increased death toll among marketable oysters during the Summer months. The problem was turned over to Dr. Carl N. Shuster, marine biologist who made a close check for two weeks prior to the opening of the natural beds to seek the reason for the lack of oyster growth.

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For thirty years Maxim has made the best grade marine silencers for gasoline or Diesel engines, large and small. Wet type or dry type (with or without spark arrestors), you can't beat them for good silencing and lowest operating cost. Ask for our latest bulletins.

And better holding with a CQR anchor

Light and easy to handle but a bulldog for holding —non-fouling—comes up clean. From 4 to 5500 lbs. Write for details.

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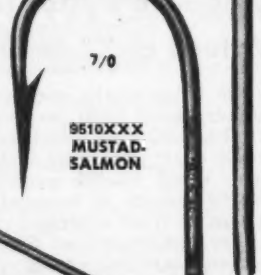
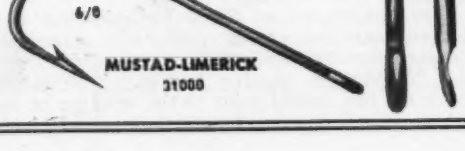
MUSTAD
Key Brand FISH HOOKS

Quick, deep penetration plus tenacious holding power. That's what Mustad fish hooks give you. Their sharp points take hold quickly and sink in deep and their sturdy Mustad-tempered bends and shanks hold your catch until you bring it into your boat. Next time you buy hooks get Mustad hooks. Remember . . . Mustads.





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2345 W 3rd St. 17070 Hamlin Rd.
Los Angeles 57 Seattle 55

BOAT CATCHES
For Month of February

Hailing fares. Figure after name indicates number of trips.

GLOUCESTER, MASS.

Alden (4)	16,500	Margie L. (4)	4,500
American Eagle (4)	71,000	Maria Immaculata (6)	17,000
Anna Guarino (1)	500	Mary (5)	15,000
Annie (1)	1,000	Mary Ann (6)	62,500
Annie & Josie (6)	12,500	Mary E. (1)	1,000
Anthony & Josephine (4)	7,500	Minkette I (1)	500
Bonaventure (2)	50,000	Mother Ann (2)	500,000
Carlannsul (9)	12,000	Nancy & Maria (7)	14,000
Carlo & Vince (2)	18,000	Natale III (7)	97,000
Catherine B. (6)	138,000	Njorth (5)	4,500
Cigar Joe (4)	62,000	No More (4)	2,500
Curlew (3)	181,500	Ocean Life (1)	250,000
Cushmere (2)	285,000	Peggy Belle (1)	500
Dawn (4)	3,000	Pioneer (7)	7,500
Dolphin (3)	178,000	Ponce De Leon (6)	6,000
Doris F. Amero (3)	158,000	Prosperity (6)	8,000
Eddie & Lulu M. (8)	9,000	Rodman Swift (3)	1,500
Estrela (1)	110,000	Rose & Lucy (5)	79,000
Eva M. Martin (3)	4,000	Rosemarie (4)	78,000
Eva II (5)	6,500	Rosie & Gracie (5)	96,000
Falcon (9)	32,500	Sacred Heart (1)	500
Florence & Lee (1)	13,000	St. Anna Maria (5)	43,000
Flow (1)	170,000	St. Anthony (2)	302,000
Frances R. (9)	73,000	St. Cabrini (3)	59,000
Frankie & Jeanne (4)	4,000	St. Francis (5)	11,500
Gaetano S. (4)	166,000	St. John (5)	6,000
Giacoma (2)	3,000	St. Joseph (2)	1,000
Hilda Garston (2)	250,500	St. Mary (11)	93,500
Holy Name (4)	17,500	St. Nicholas (1)	119,500
Ida & Joseph (2)	42,000	St. Peter (4)	66,500
Immaculate Conception (5)	24,000	St. Providenza (7)	8,500
Irma Virginia (4)	11,000	St. Rosalie (4)	92,000
Jackie B. (4)	39,000	St. Terese (7)	51,000
Jackson & Arthur (4)	4,000	Salvatore & Grace (6)	130,000
Jennie & Lucia (1)	30,000	Santa Lucia (3)	4,000
Joseph & Lucia (1)	110,000	Sebastiana C. (4)	91,000
Josie II (6)	9,500	Serafina N. (6)	35,500
Judith Lee Rose (1)	120,000	Serafina II (5)	79,000
Kingfisher (2)	443,000	Sunlight (2)	181,500
Lady of the Rosary (2)	22,000	Theresa M. Boudreau (2)	435,000
Linda B. (6)	6,500	Trimembral (3)	2,500
Little Flower (6)	29,000	Vagabond (2)	69,000
Little Joe (7)	13,500	Victoria (5)	3,500
Lone Ranger (3)	3,000	Villanova (1)	127,000
Luckimee (1)	150,000	Vincie N. (1)	10,000
Madonna Di Siracusa (5)	5,000	Virginia (1)	2,000
		Virginia Ann (6)	11,500
		White Owl (4)	6,000
		Wild Duck (2)	153,500

Scallop Landings (Lbs.)

B. Estelle Burke (1)	1,000	Francis L. MacPherson (2)	16,000
Brother Joe (1)	4,500	Margie M. (2)	3,000
Cap'n Bill (3)	13,500	Michael F. Densmore (1)	8,000

PORTLAND, ME.

Agnes & Elizabeth (3)	72,000	Medan (1)	250,000
Alice M. Doughty II (5)	126,000	Ocean Clipper (1)	12,000
Andarte (6)	204,000	Minnie (1)	220,000
Catherine B. (1)	9,000	Quincy (2)	345,000
Courier (4)	141,000	St. George (2)	161,000
Dorchester (1)	70,000	St. Joseph (1)	7,000
Dorothy & Ethel II (4)	64,000	Silver Bay (3)	197,000
Elinor & Jean (6)	155,300	Theresa R. (3)	261,000
Ethelina (5)	163,000	Vandal (4)	176,000
Gulf Stream (3)	275,000	Wawenock (1)	140,000
Kennebec (4)	114,000	Winthrop (4)	254,000

Scallop Landings (Lbs.)

Adele K. (1)	6,000

SEATTLE

Halibut Fleet Fishery

Kiska (2)	14,702

WITH **CATERPILLAR MARINE ENGINES**

YOU'LL have more time to tend your nets with a Caterpillar* Marine Engine in your boat. Cat* Diesels are designed and built to take you out and bring you back without trouble. Burning cheap, No. 2 burner fuel, Cat Engines can idle or run at full load for hours without fouling or choking. Every drop of fuel is cleaned by absorbent-type fuel filters. Induction-hardened crankshafts assure long, trouble-free work lift. Vital parts are assured proper lubrication with clean oil, regardless of pitch or toss of the boat, by pressure oil pumps. No adjustments or attention are needed, all your hands are available for fishing. We can help you select the right Cat Marine Diesel to power your boat . . . help you custom-tailor the engine to your preferences. Call for a free power analysis — today!

*Cat and Caterpillar are registered trademarks of Caterpillar Tractor Co.

PERKINS-MILTON CO. INC.

Marine Division: 4 Water St., Fairhaven, Mass. *Phone:* New Bedford 6-0011

Main Office: 376 Dorchester Ave., Boston, Mass. *Phone:* ANdrew 8-4660

STONINGTON, CONN.

Bette Ann (7)	3,300	Little Chief (6)	1,900
Carolyn & Gary (8)	6,700	Marise (8)	3,100
Connie M. (10)	4,700	Old Mystic (7)	4,200
Irene & Walter (12)	10,400	Our Gang (1)	1,800
Jane Dore (8)	4,600	Theresa (1)	1,300
Lt. Thos. Minor (9)	8,900	Weezie May (3)	3,300
Lisboa (1)	1,000	William B. (7)	2,400

NEW BEDFORD

Adventurer (3)	30,200	Katie D. (2)	60,000
Anastasia E. (2)	20,500		
Annie Louise (1)	8,600	Marie & Katherine (1)	6,500
Annie M. Jackson (3)	29,500	Mary E. D'Eon (2)	40,000
Arnold (1)	7,600	Mary Tapper (3)	72,000
Austin W. (3)	31,200	Midway (3)	46,000
		Molly & Jane (2)	22,500
Barbara M. (2)	37,000		
Bernice (1)	3,200	Nautilus (3)	116,400
Capt. Deebold (2)	27,100	Pauline H. (2)	69,400
Carl Henry (2)	60,100	Phillip & Grace (2)	60,000
Christina J. (2)	42,000	Phyllis J. (2)	24,100
Christine & Dan (1)	15,000		
Connie F. (2)	40,500	Reneva (1)	22,300
Comber (2)	25,500	Roann (2)	22,500
		Roberta Ann (3)	55,800
Dauntless (2)	31,000	Rose Jarvis (1)	7,600
		Rosemarie V. (3)	45,500
Elva & Estelle (1)	6,200	Rush (2)	32,800
Elva L. Beal (3)	22,400	Ruth & Nancy (3)	19,300
Eugene & Rose (2)	32,000	R. W. Griffin (1)	28,000
Eunice-Lilian (3)	56,700	R. W. Griffin, Jr. (3)	64,800
Gannet (2)	60,800	St. Ann (3)	38,500
Gladys & Mary (3)	76,000	Sea Fox (2)	32,300
Growler (3)	63,300	Sea King (1)	20,000
		Shannon (3)	35,500
Harmony (3)	43,200	Silver Mink (1)	25,100
Hope II (2)	58,500	Solveig J. (3)	126,000
Huntington Sandford (1)	9,300	Sonya (1)	12,000
		Stanley B. Butler (1)	62,700
Invader (3)	70,000	Sunbeam (1)	23,000
Ivanhoe (3)	40,000		
		Venture I (2)	56,500
Jacintha (2)	64,500	Victor Johnson (4)	70,500
Janet & Jean (3)	41,000	Viking (3)	97,000
Jeannie Ann (1)	8,500		
Jimmy Boy (3)	54,600	Whaler (3)	64,200
Joan & Tom (1)	22,000		
Julia DaCruz (1)	24,500		

New Bedford Scallop Landings (Lbs.)

Aloha (2)	19,700	Lauren Fay (2)	17,700
Alpar (2)	13,500	Louis A. Thebaud (2)	9,400
Amelia (3)	20,200	Linus S. Eldridge (2)	20,900
		Louise (3)	33,000
B. & E. (3)	18,400		
Barbara (2)	10,000	Malene & Marie (2)	18,000
Bobby & Harvey (2)	11,400	Mary Ann (1)	10,000
Bright Star (2)	22,000	Mary J. Hayes (2)	17,700
		Monte Carlo (2)	11,400
Camden (2)	14,000	Moonlight (3)	22,500
Caracara (1)	8,500		
Carol & Estelle (2)	9,200	Nancy Jane (2)	11,500
Catherine & Mary (2)	11,400	Nellie Pet (1)	11,000
Charles S. Ashley (2)	19,800	New Bedford (2)	22,000
		Newfoundland (1)	11,000
Dartmouth (2)	15,500	Noreen (2)	21,500
Debbie Jo-Ann (2)	20,200		
Dorothy & Mary (1)	8,000	Palestine (1)	3,600
		Pearl Harbor (2)	18,200
Edgartown (2)	19,500	Pelican (2)	20,000
Eleanor & Elsie (2)	16,000	Porpoise (2)	17,500
Elizabeth N. (2)	16,200		
Ethel C. (2)	17,500	Ruth Moses (1)	11,000
Eugene H. (2)	16,300		
		Santa Cruz (1)	3,700
Fairhaven (2)	17,000	Sea Hawk (1)	5,200
Falcon (2)	17,100	Sea Ranger (1)	9,500
Fleetwing (2)	20,500	Smilyn (2)	8,300
Friendship (2)	8,300	Stella Maris (1)	2,500
Jerry & Jimmy (2)	19,000	Ursula M. Norton (2)	22,000
John G. Murley (2)	18,700		
Josephine & Mary (1)	6,500	Vivian Fay (2)	13,000
Kingfisher (2)	14,500	Wamsutta (1)	7,000
		William H. Killigrew (2)	13,500
Laura A. (2)	18,000		

WOODS HOLE, MASS.

Arnold (4)	15,600	Madeline (2)	6,300
Cap'n Bill (1)	20,500	Phyllis J. (1)	2,700
Cap'n Bill II (2)	53,800	Priscilla V. (2)	19,300
Connie (1)	1,400	Roann (1)	3,700
Elva & Estelle (3)	9,000	Southern Cross (2)	20,800
Gertrude D. (2)	17,300	Three Bells (2)	13,000

Scallop Landings (Lbs.)

Lubenray (2)	8,500	Mary Anne (1)	9,600

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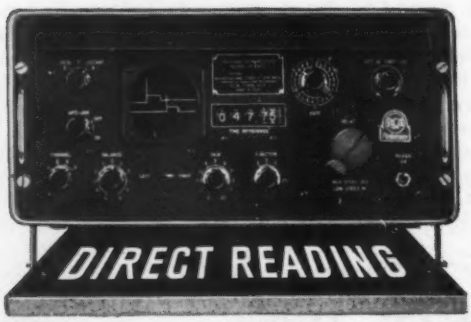

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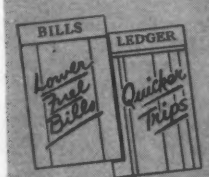

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Agatha & Patricia (3)	117,700		
Alden (1)	19,400	Nancy B. (2)	58,700
Angie & Florence (3)	43,600	New Star (3)	331,500
Arlington (3)	488,800	Notre Dame (3)	122,800
Atlantic (1)	171,000		
		Ocean Clipper (4)	133,400
Baby Rose (3)	136,000	Ocean Wave (2)	46,400
Bay (2)	262,000	Ohio (3)	336,800
Bonaventure (2)	83,100	Olympia (3)	117,600
Bonnie (2)	253,700	Olympia LaRosa (1)	26,800
Bonnie Billow (2)	243,000		
Bonnie Breaker (2)	186,200	Pam Ann (3)	318,000
Bonnie Breeze (2)	232,000	Patty Jean (3)	355,600
Brighton (2)	211,100	Phantom (2)	319,300
Buzz & Billy (4)	131,800	Pilgrim (3)	135,200
		Plymouth (1)	104,800
Cambridge (3)	443,500	Puritan (3)	120,300
Catherine B. (4)	21,200		
Charlotte G. (1)	37,000	Racer (1)	138,200
Columbia (2)	94,400	Raymonde (3)	199,500
Comet (2)	321,700	Red Jacket (3)	453,300
		Rosa B. (1)	137,000
Eagle (2)	105,100	Rosalie D. Morse (1)	115,500
Elizabeth B. (2)	174,000	Rush (2)	259,800
Emily H. Brown (2)	187,200		
		St. Anna (1)	3,300
Flying Cloud (4)	597,300	St. Joseph (2)	48,600
Four (2)	188,300	St. Victoria (3)	115,800
		San Calogero (1)	2,700
Gerald & Phyllis (2)	92,300	Sant' Antonio II (1)	7,100
		Santa Maria (3)	87,800
Holy Family (3)	170,400	Santa Rita II (2)	16,500
		Savoia (1)	3,800
Ida & Joseph (2)	57,200	Star of the Sea (2)	70,200
		Sunlight (1)	50,300
Jane B. (3)	194,500	Swallow (2)	194,800
J. B. Junior (1)	148,300		
Jennie & Lucia (3)	89,900	Texas (3)	245,500
Josephine F. (4)	23,000	Thomas D. (3)	119,000
Josephine P. II (2)	31,800	Thomas Whalen (2)	222,800
Leonard & Nancy (2)	73,400	Villanova (3)	87,600
		Vincie N. (2)	47,900
Magellan (3)	65,000		
Maine (3)	427,400	Weymouth (2)	289,000
Manuel F. Roderick (3)	182,300	Wild Duck (1)	57,800
Maria Christina (1)	4,600	William J. O'Brien (2)	227,200
Mary & Joan (2)	208,000	Winchester (3)	337,100
Mary Rose (3)	155,900	Wisconsin (3)	487,600
M. C. Ballard (3)	274,300		

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Barbara & Gail (1)	29,000	Golden Eagle (3)	140,000
Carol-Jack (3)	120,000	Hazel B. (2)	96,200
Catharine C. (2)	63,700	Joseph S. Mattos (4)	168,500
Charlotte M. (1)	45,000	Lady of Good Voyage (4)	144,500
Clipper (3)	166,700	Manuel P. Domingoes (4)	162,500
Edith L. Boudreau (4)	178,500	Miriam A. (3)	70,000
Evelina M. Goulart (3)	142,000	Teresa & Jean (2)	74,100
Felicia (2)	80,500	Tina B. (3)	112,000
Figueira DaFoz (3)	121,500		

Scallop Landings (Lbs.)

Beatrice & Ida (2)	16,300	Norseman (1)	6,300
Enterprise (2)	18,100	Richard Lance (1)	6,800
Florence B. (1)	11,000	Rosalie F. (1)	3,000
Muskegon (2)	11,700	S. No. 31 (2)	15,100

ROCKLAND, ME.

Araho (1)	80,000	Helen Mae II (3)	29,800
Crest (1)	215,000	John J. Nagle (1)	65,000
Dorothy & Betty (1)	17,000	Little Growler (2)	34,000
Dorothy & Betty II (3)	45,000	Mabel Susan (1)	13,500
Flo (1)	9,000		

Scallop Landings (Lbs.)

Pocahontas (1)	11,000	Rhode Island (2)	6,400

Senator Saltonstall to Address NFI Convention at Miami Beach

Principal speaker at the National Fisheries Institute's 11th Annual Convention in Miami Beach, Fla. from April 12-18 will be Senator Leverett Saltonstall of Massachusetts.

A record-breaking number of advance registrations have been received for the convention, which is to be held at the Seville Hotel. As of March 1, advance registrations stood at 531, about double the highest figure for any convention prior to that at New Orleans.

General Chairman of the convention is Max Swartz of Miami, while Mrs. Anthony J. Robida of Jacksonville is head of the Ladies Reception Committee.

New Fort Myers School To Train Florida Men In Commercial Fishing

A school for fishermen, organized by the University of Miami Marine Laboratory, was slated to open March 1 in Fort Myers, Fla. It will, at first, be operated as a high school club.

This school and others to be started in Florida have several objectives beyond the training of men in fishing and fish handling. It will introduce high school students to marine biology, oceanography and fisheries science, all fields which suffer from a dearth of trained men, and will help the students prepare for advanced marine science studies in universities.

The possibility of future financial support for the Fort Myers fisheries school has become promising with the recent introduction in the U. S. Senate of a bill by Sen. Frederick G. Payne of Maine, to promote the fishing industry by providing for the training of needed personnel. The bill provides for college scholarships, so that some students will benefit by the provisions from high school through post-graduate university courses.

The school at Fort Myers will be experimental, and it is expected to serve as a model for future schools if the Payne Bill is approved by Congress. The schools will encourage many activities designed to spotlight seafoods and increase their use throughout the country. One of these activities will be to plan such affairs as fish frys, crab feasts, oyster roasts, clam bakes, shrimp barbecues, etc.

The new fisheries school at Fort Myers will be supervised by the fisheries staff of the University of Miami Marine Laboratory, and will be operated by volunteers experienced in the various branches of commercial fisheries. Coordinator is LaMarr Rose, attorney and commercial fisherman of Fort Myers. Program directors include Tom Smoot, seafood and marine supply dealer, and Arthur Baker.

Ed Hanson, a Fort Myers shipbuilder, will be on the local advisory board, which also will include Dr. F. G. Walton Smith, director of the Marine Laboratory, and Dr. C. P. Idyll, in charge of the Laboratory's fisheries program; Ernest Mitts, director of the State Board of Conservation; and Bernard Stevenson of the Fort Myers High School. Jack Brawner of the Marine Laboratory staff will be official liaison officer.

Outbreak of Red Oysters Reported In Chesapeake, Gulf of Mexico

Reports of red oysters have been received by the Oyster Institute of North America from a number of places along the Atlantic Coast and the Gulf of Mexico. Red oysters occurred in certain parts of the Chesapeake Bay and in Galveston Bay at almost exactly the same time—just before Christmas. A similar condition appeared in oysters from the bays of Florida.

Some differences of opinion have arisen as to the cause of this discoloration, but there has been rather general agreement that it is different from the old pink yeast. The oysters in the recent outbreak were for the most part quite fresh, and had been out of the water only a few days. In some cases the oyster liquor was red, and in one case was described as a cherry red.

The Board of Directors of the Oyster Institute recently adopted a resolution calling on the Federal research agencies of the Fish and Wildlife Service and the Public Health Service to look into the red oyster problem to determine if possible the cause of the outbreak and what, if anything, can be done to control it.

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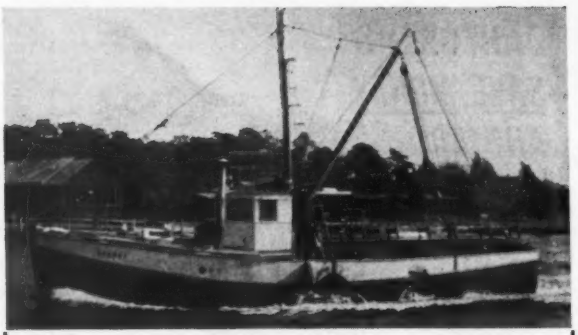

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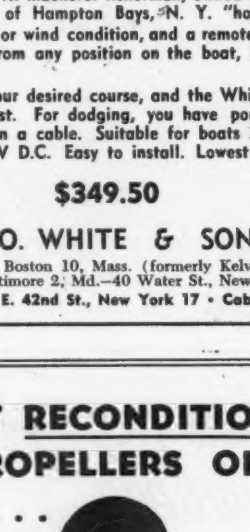

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Virginia Patent Tong Bill Killed

The House Committee on the Chesapeake and its tributaries on February 23 killed the Murphy Bill that would have opened more of the Rappahannock to patent tonging. In an attempt to save the bill, introduced at the request of the Lancaster County Oystermen's Benefit Assoc., Murphy offered compromise amendments.

The amendments would have opened up about 10 miles of the river above Towles Point. The original bill would have permitted patent tonging for a distance of about 25 miles up river from the present limit. However, the amendments died with the bill.

Predict Improved Oystering in 1957

Scientists at the Virginia Fisheries Laboratory at Gloucester Point for ten years have been collecting information about oysters on the public grounds of the State. Above Towles Point the 1954 set was about ten times as good as in any previous year since 1944. This set, which will reach market size during the Winter of 1957-58, should restore production to at least the pre-hurricane level except in the uppermost area around Morattico. The set in the river below Towles Point is about the same as usual, and biologists can foresee no great change in that area.

Favor Higher Bushel Tax on Oysters

Members of the Lancaster County Oystermen's Benefit Assoc. last month unanimously adopted a resolution advocating a tax of five cents on each bushel of oysters taken from the public rocks, the proceeds to be used for the rehabilitation of the public rocks. Proceeds of the present tax of two cents per bushel, it is claimed, is not sufficient to do the job in the manner desired by the oystermen.

Fishermen's Association Meeting Well Attended

The annual meeting of the Virginia Fishermen's Association was held February 5 to 7 at the Chamberlin Hotel, Old Point Comfort, with a record attendance. Principal guest speakers were W. Edward Glennon, president of the American Feed Manufacturers Association; Arnie J. Suomela, assistant director, and A. W. Anderson, chief of the Branch of Commercial Fisheries, Fish and Wildlife Service; Jerome Sachs, director of the Insurance Staff, Bureau of Foreign Commerce; and Warner C. Danforth, Boston University.

Officers elected at the business meeting were G. H. McNeal, Jr. of McNeal-Edwards Co. and the McNeal Co. of Reedville, president; H. R. Humphreys, Jr., Standard Products Co. of White Stone, Reedville and Moss Point, Miss., vice-president; W. A. Mercer, local manager for J. Howard Smith, Inc. and Menhaden Products Co., secretary-treasurer; and Ammon G. Dunton of White Stone, counsel.

Highlight of the meeting was a panel discussion on the research program being conducted by the Federal Government on behalf of the menhaden industry.

Seek to Protect Oysters in Channel Dredging

A resolution introduced in the General Assembly by Russel Carneal of Williamsburg voices the Assembly's opposition to channel dredging in the James River if there should be indication of a harmful effect on the oyster industry. Carneal expressed the fear that the dredging might mean the dumping of large deposits of mud onto oyster beds.

Commission Requests More Oyster Funds

A House committee was told last month that the Commission of Fisheries would need an extra $60,000 in 1956-57 and 1957-58 to replace oysters damaged by the oyster drill and by the storms of last Fall. Charles G. Lankford

Jr., chairman of the Commission of Fisheries, said a joint repletion program with the State of Maryland in the Potomac River, would cost $25,000 a year.

Lankford emphasized that the damage to oyster beds on the Eastern Shore and in the mainland rivers had occurred after the budget requests were filed last year. Damage by the oyster drill has been serious on the ocean side of the Eastern Shore.

Shad and Herring Season Opens

Spring fishing for shad and herring opened in Virginia on March 1. Pound fishermen are catching a few herring in the creeks along the Eastern Shore of Virginia.

Still Oystering on Nanticoke River

The oyster season in Tangier waters was drawing to a close the first of March, but Tangier tongers were still tonging on oyster farms on the Nanticoke River, Md. According to reports, they were taking from 40 to 60 bushels a day. The planters were paying the tongers 75 cents a bushel.

Oyster Mortality Rate Lowest in Years

Biologists at the Virginia Fisheries Laboratory, Gloucester Point, have concluded that oyster deaths from fungus infection on planted grounds in Chesapeake Bay and the lower parts of the rivers were probably lower last Summer than for the past several years. These conclusions are based on checks of large numbers of oysters suspended in trays in the York River at the Laboratory pier, and on examination of oysters from planted grounds in various parts of Chesapeake Bay. The scientists are speculating that the cold Winter of 1954-55 and the relatively cool June and September of 1955, held the usual Summer epidemic down to a low level.

Hampton Roads Area Landings

Production of fish in the Hampton Roads area during February amounted to 3,833,500 lbs., landed by trawlers and pound netters. This was slightly less than in February, 1955, and was a drop of approximately 650,000 lbs. from January. Pound netters became active again, with 219,300 lbs. taken by this type of gear, compared to only 20,900 lbs. in January. The first alewife and shad landings of the season were made, totalling 94,100 lbs. and 11,800 lbs. respectively.

Decline of Croakers a Mystery

During World War II the demand for fresh fish rose, and with this rise the croaker became popular as a food fish. As more tried the fish, its good flavor became known, and it soon was the most valuable fish produced in Maryland. Production reached an all-time Maryland peak of about 5,000,000 lbs. in 1945 and then declined abruptly. Since that time the production of sportsmen and commercial fishermen combined has been low, with only occasional good catches.

The feeling at first on the part of everyone was that the decline was temporary. But there has been no recovery in ten years. During that time a controversy as to the cause of the decline has been precipitated. The most frequent explanation is that overfishing by the commercial fishermen of Maryland accounted for the disappearance of the croaker.

However, it has been proved that the croaker spends only about four months of every year in Maryland waters. During eight months the fish are concentrated in the lower Bay or in the ocean along the coast. During the period when three to five millions of pounds were caught in Maryland, 30 to 50 millions were produced elsewhere in the general area described above. It is difficult to understand how the relatively small Maryland catch was the major cause for the decline, since it was less than 10 per cent of the total fish landed.

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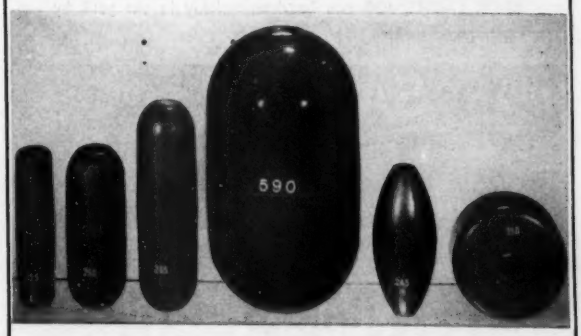

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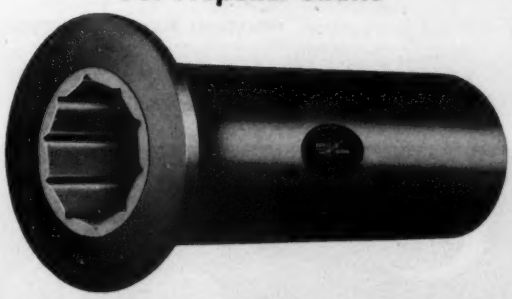

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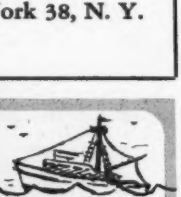

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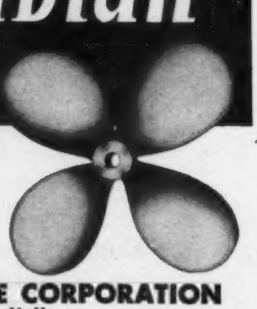

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New Bedford Fluke Catch Shows Gain

A total of 3,223,900 pounds of fish and scallops were landed in New Bedford during January, as compared to 2,718,300 pounds in January, 1955. The increase was in fluke, as the total catch of that species during the period far surpassed the yield in January of many other years.

During January this year 57 scallopers made 79 trips and 63 draggers made 121 trips. By species the arrivals during January were as follows: 144,200 lbs. cod; 123,700 lbs. haddock; 23,700 lbs. grey sole; 24,000 lbs. lemon sole; 228,600 lbs. yellow-tail; 42,600 lbs. blackback; 29,400 lbs. dabs; 1,654,900 lbs. fluke; 210,800 lbs. tile; 626,400 lbs. sea scallops and 115,600 lbs. all others.

Want Fisheries Laboratory Established

New Bedford interests made a strong bid for a fisheries laboratory at a hearing held at the State House in Boston on January 25. Purpose of the marine laboratory would be to find new commercial uses for so-called "trash fish". There are about 15,000 species of fish swimming off the Atlantic coast, and only five species are eaten. If ways could be found to channel other species into the commercial market, it would help the industry.

Change Over to Dragging

Five New Bedford vessels recently changed over from scalloping to dragging, including the *Rush, Marmax, Mary E. D'Eon, Ursula Norton* and *Babe Sears.*

Six-Gilled Shark Landed

A six-gilled shark, weighing 180 pounds and 7 ft. 9 inches long, was brought in last month on the *Cap'n Bill II,* Capt. Arthur C. Nelson. Not since March 1886 when a ten foot specimen was taken near Currituck Lighthouse, North Carolina, has a shark of this type been caught on the east coast of North America. It was brought to the Woods Hole Oceanographic Institution for identification.

Caught off the northern edge of Georges Bank, the shark is one of two species having six gills. Most sharks have five gills. This species is known as a ground shark and lives in moderately deep water. It is found all over the world and is common off the northern coast of Cuba.

Fishermen Have Narrow Escape

Capt. John Stello of the 44 ft. fishing boat *Jeannie's* and his companion Vincent LeBlanc of Chatham had a close call last month when their boat was hit by a high wave and nearly capsized off the tip of Nauset Beach. Stello was washed overboard by the wave that struck the boat broadside, and LeBlanc managed to stay aboard by clamping his arm around the engine's exhaust pipe.

Capt. Stello was pulled from the water by Edward Boudreau, skipper of the *Bobby and Louis,* which was following the *Jeannie's* to Chatham.

Recommend Funds for Rebuilding Laboratory

The House Appropriations Committee last month recommended an appropriation of $930,000 for rebuilding the research laboratory and other facilities at the Woods Hole Fishery Biological Station. The laboratory suffered heavy hurricane damage, and Congress last year voted funds for reconstruction of the breakwater and the dock.

Pond Village Freezer Being Modernized

Officials of the Plymouth Bay Packing Co., Inc., report that the Pond Village Freezer at Truro, vacant for a year, is being renovated for year-round operation. Modernization of the plant to handle between 12,000,000 and 14,000,000 pounds of frozen fish, in addition to large quantities of fresh fish, will be completed by April 1.

Gloucester's New Freezer Plant Ready for Operation

The new Quincy Market freezer held open house recently with about 350 people attending. The two floors of the building have a total area of one million cubic feet of refrigerated holding space. This will take care of from 12 to 14 million pounds of fish. To keep the temperature at five below zero, 16 miles of brine pipes blanket the ceilings and walls.

The freezer part of the building is 204 feet long and 162 feet wide. The storage area has 64,000 square feet. The stacking height on the first floor is 11 feet, and on the second, 17 feet.

The Quincy Market Cold Storage & Warehouse Co. also recently purchased the cold storage plant on Rogers St. owned by Gorton-Pew Fisheries Co. This plant has a capacity of about 2½ million pounds, bringing the total capacity of the two plants to some 15 million pounds.

Fish Laboratory Bill Referred to Study

A bill proposing that the State establish a fisheries laboratory in Gloucester has been referred to a study, which may mean burying it, or it could mean that a Legislative recess commission would study the bill after the close of the Legislature's present term and report back before the 1957 session, or without recommendations.

Freighters Land Imported Fish

Starting last month Gloucester began playing host to the Canadian shipping firm of Fisheries Products Ltd., St. Johns, Nfld. This firm will now send its three small freighters to Gloucester with frozen blocks and slabs. They have been landing in Providence, R. I. since 1950.

Gorton-Pew Laboratory Makes Quality Tests

The Gorton-Pew Laboratory is engaged in the continuous job of research to improve quality of fish and fish by-products. Quality control inspectors select at random samples of products as they go through the production lines. These, along with reports, are returned to the chemical laboratory for examination and tests which reveal such things as the salt content present, or, if the oil used to fry fish sticks is being kept at the proper percentage.

Canned products are incubated to be sure the tins will not swell. Spot checks are made at the various cold storage plants of the frozen fish blocks and frozen fried fish sticks. All fish blocks purchased are spot checked to be sure they are free of bone or skin and of good quality.

Capt. Jack Hackett

Capt. Jack Hackett, life-long Gloucester fisherman and skipper, was lost overboard fom the dragger *Mother Ann* 325 miles from port last month. He was on his way up to take a watch at 12:30 in the morning.

Capt. Hackett had been a crew member of the vessel only since last Fall. Before this he had been skipper of the *Louise*, the *Brookline* and the *Wild Duck*, and was one of the crew members of the schooner *Gertrude L. Thebaud* for her 1938 Fishermen's Race against the *Bluenose*.

Capt. Michael Driscoll

Capt. Michael John Driscoll, 74, deep-water skipper for many years, died on February 10 in Gloucester. Prior to coming to Gloucester he had fished out of Falmouth Harbor, Me., for more than 10 years. He was skipper of several Gloucester vessels, including the *Andarte*, *Killarney*, *Doris Hawes*, *Evelyn Ralph* and the *Col. Lindbergh*.

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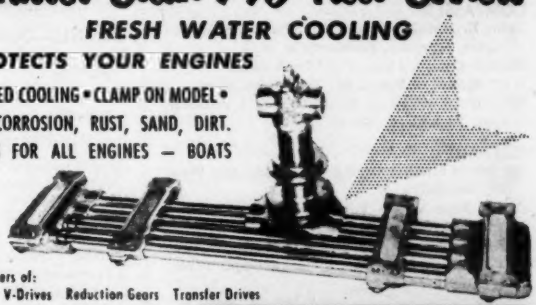

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FOREIGN BAILINGS

SILVER COD TROPHY is to be awarded to British distant-water trawler with largest annual catch, by the British Trawlers' Federation. The trophy is to be presented for the first time to *Arctic Warrior* of Hull, which in 1954 landed 5,869,000 pounds of fish. It is claimed that the vessel's catch is a world record.

As the trawler has a crew of 20, this means that the average annual catch per man was 293,000 pounds. A total of 330 days were spent at sea, comprising 16 trips averaging 20.6 days a trip.

AUSTRALIAN LOBSTER is to be exported in greater quantities to United States, and it is planned to initiate export of shrimp to U. S., the Australian Director of Fisheries has announced.

"AIR-FREEZING" of tuna is being done by Japanese aboard their longliners. One boat returned with 660,000 pounds of tuna after a four-month trip. The new freezing method held them in such good shape that most of the tuna was sold as fresh raw fish. This freezing method is being used on motherships.

NEW CANADIAN COMMISSIONER on International Commission for Northwest Atlantic Fisheries is John T. Cheeseman, St. John's, Nfld. Mr. Cheeseman succeeds Louis S. Bradbury.

TUNA FISHING PROSPECTS are to be explored in South Australia. The sum of $17,900 has been provided for purchase of fishing vessel to be used in research work and for catching of live bait. Two United States tuna fishing experts will go to South Australia.

MEXICO'S SHRIMP FISHERY on the West Coast was very good in 1955-56, following several years of declining catches. Freezing plants worked at capacity, and boats docked alongside wharf 4-6 days waiting to unload catches.

NEAR-RECORD HERRING TAKE has been reported in Norway, where first phase of seasonal herring fisheries came to an end as of Feb. 14. Total landings of fat herring were tentatively estimated at 865,800 metric tons, only 1,800 tons less than in record year of 1954.

DANISH FISH CATCH was at record level in 1955, both as to quantity and value. Total production amounted to about 923.7 million pounds, as compared with 778.2 million pounds in 1954.

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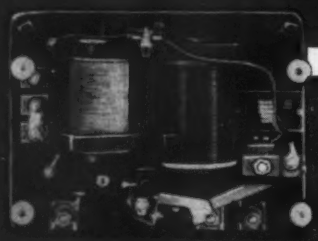

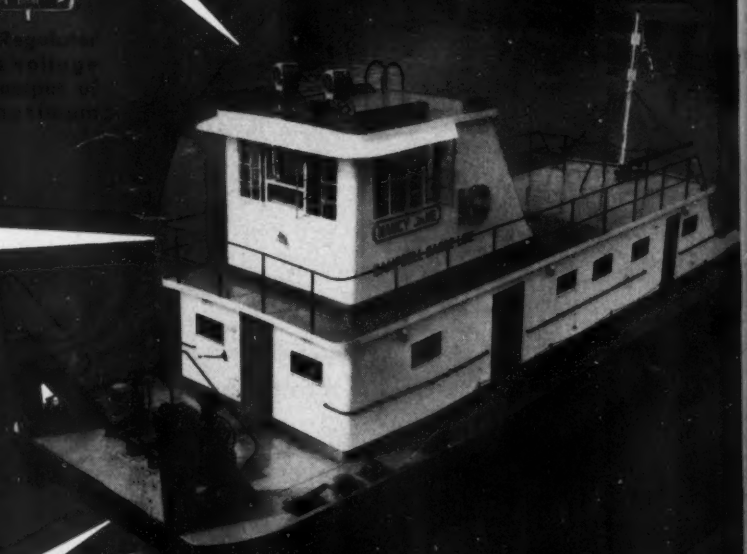

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